



# Community Profile Report

## December 18 2020

The Community Profile Report (CPR) is generated by the Data Strategy and Execution Workgroup in the Joint Coordination Cell, under the White House COVID-19 Task Force. It is managed by an interagency team with representatives from multiple agencies and offices (including the United States Department of Health and Human Services, the Centers for Disease Control and Prevention, the Assistant Secretary for Preparedness and Response, and the Indian Health Service). The CPR provides easily interpretable information on key indicators for all regions, states, core-based statistical areas (CBSAs), and counties across the United States. It is a daily snapshot in time that:

- Focuses on recent COVID-19 outcomes in the last seven days and changes relative to the week prior
- Provides additional contextual information at the county, CBSA, state and regional levels
- Supports rapid visual interpretation of results with color thresholds

Data in this report may differ from data on state and local websites. This may be due to differences in how data were reported (e.g., date specimen obtained, or date reported for cases) or how the metrics are calculated. Historical data may be updated over time due to delayed reporting. Data presented here use standard metrics across all geographic levels in the United States. It facilitates the understanding of COVID-19 pandemic trends across the United States by using standardized data. The footnotes describe each data source and the methods used for calculating the metrics. For additional data for any particular locality, visit the relevant health department website. Additional data and features are forthcoming.

**White House COVID-19 Task Force, Joint Coordination Cell, Data Strategy and Execution Workgroup**

All inquiries and requests for information to DSEW should be directed to [COVID-Data-RFI@hhs.gov](mailto:COVID-Data-RFI@hhs.gov).

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# COMMUNITY PROFILE REPORT

## Table of Contents

<b>National Time Series</b>	<b>3. National time series</b> (national case, death, percent test positivity, and hospital admission curves) <b>4. Regional time series</b> (regional case, death, percent test positivity, and hospital admission curves)
<b>National Maps</b>	<b>5. Number of new cases and deaths in the last 7 days</b> <b>6-8. Case incidence/Mortality rate/Percent test positivity in the last 7 days and comparison to the previous 7 days</b> <b>9. Hospital Admissions in the last 7 days and comparison to the previous 7 days</b> <b>10. Hospital Capacity in the last 7 days and comparison to the previous 7 days</b> <b>11. Area of Concern Continuum</b> (describes communities as they progress through stages of the epidemic) <b>12. Area of Concern Continuum - Rapid Riser Counties</b> (highlights counties with recent acceleration in cases)
<b>National and State Metrics</b>	<b>13. National and regional metrics</b> (key indicators at the regional and national levels) <b>14-15. State profiles and weekly categories</b> (states grouped into categories based on their percent test positivity)
<b>National Trends</b>	<b>16. Trends in case incidence during the last 8 weeks</b> (state, regional and national case incidence curves) <b>17. Trends in mortality rate during the last 4 weeks and 4-week forecast</b> (state and national mortality curves, with 4-week CDC ensemble forecast) <b>18. Trends in percent test positivity during the last 8 weeks</b> (state, regional and national percent test positivity curves) <b>19. Trends in hospital admissions per 100 beds during the last 8 weeks</b> (state, regional, and national hospital admission curves) <b>20. Trends in hospital inpatient COVID utilization during the last 8 weeks</b> (state, regional, and national hospital utilization curves) <b>21. Trends in test positivity and volume by age group</b> (national trends showing test volume, number of tests, and percent test positivity by age group) <b>22. Regional trends in test positivity by age group</b>
<b>CBSA Profiles</b>	<b>23. Select high burden core-based statistical areas (CBSAs)</b> (CBSAs with the highest disease burden for each population size) <b>24. Select core-based statistical areas (CBSAs) with increasing burden</b> (CBSAs with the largest recent increases in disease burden for each population size)
<b>Data Sources and Methods</b>	<b>25. Data sources and methods</b> (data sources/notes, definitions for color coding used throughout slides) <b>26. Data sources and methods – dynamic data notes</b> (data notes that are updated each day or as needed) <b>27. Data sources and methods – AOC continuum</b> (detailed description of 7 stages of the epidemic described within the AOC continuum)

White House COVID-19 Task Force, Joint Coordination Cell, Data Strategy and Execution Workgroup

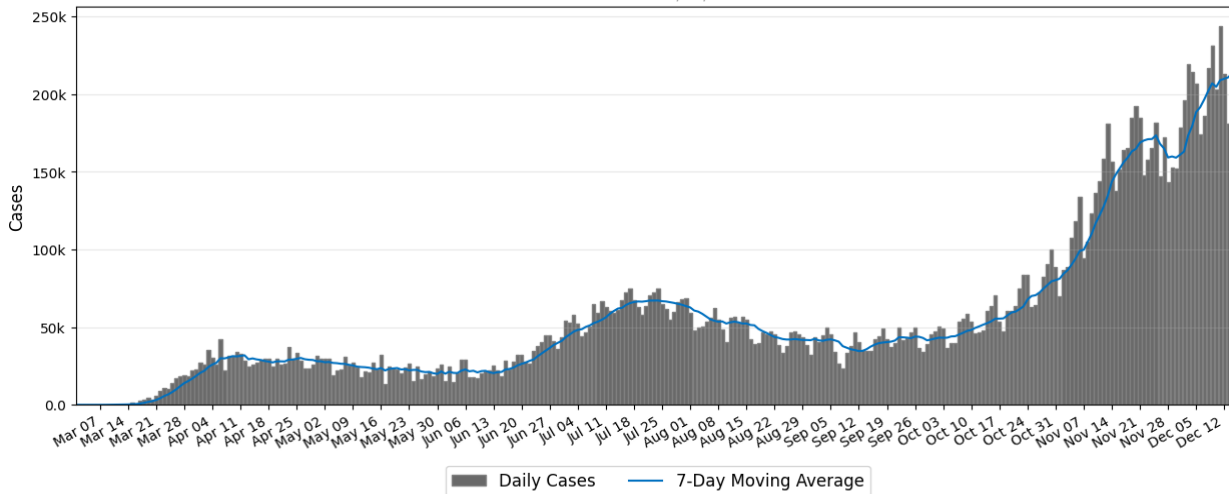
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# NATIONAL TIME SERIES

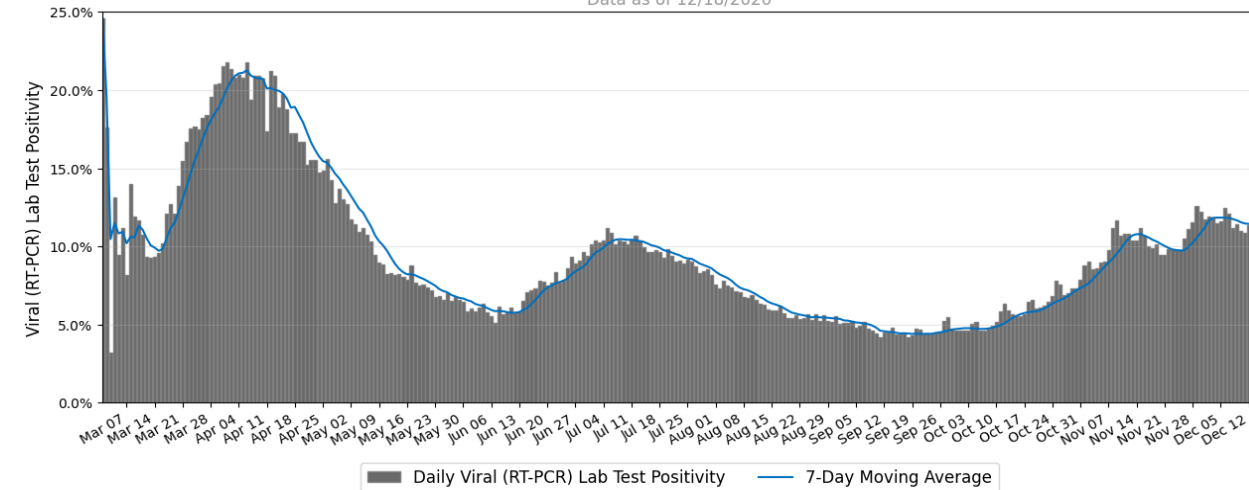
## New Cases

Data as of 12/18/2020



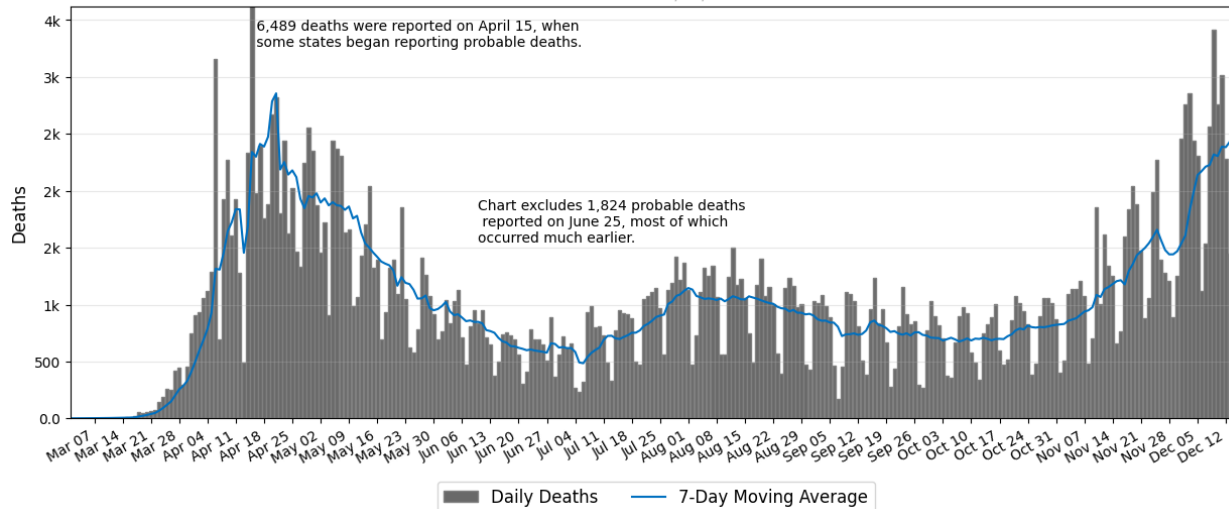
## Viral (RT-PCR) Lab Test Positivity

Data as of 12/18/2020



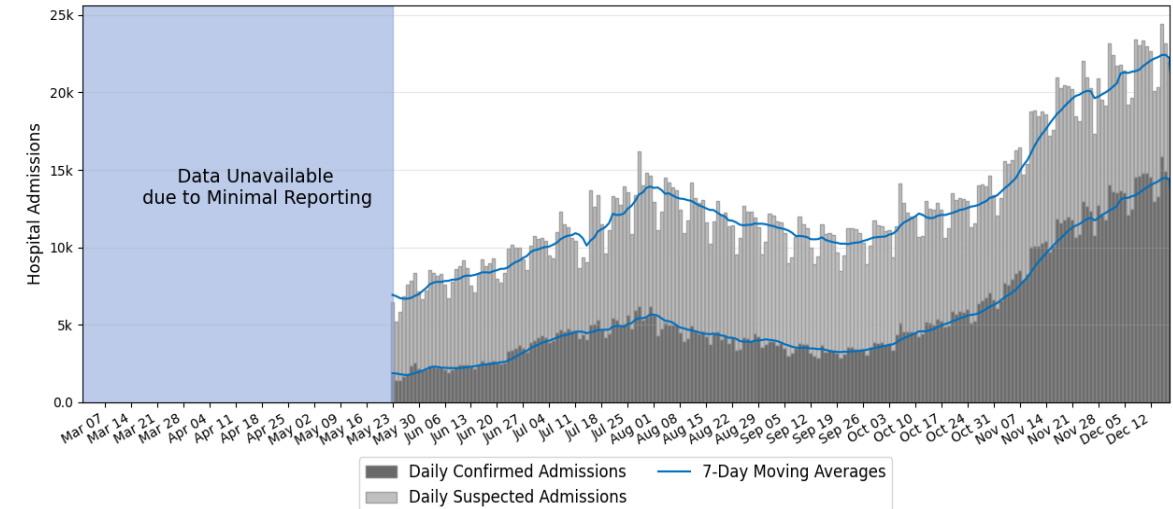
## New Deaths

Data as of 12/18/2020



## New Hospital Admissions

Data as of 12/18/2020

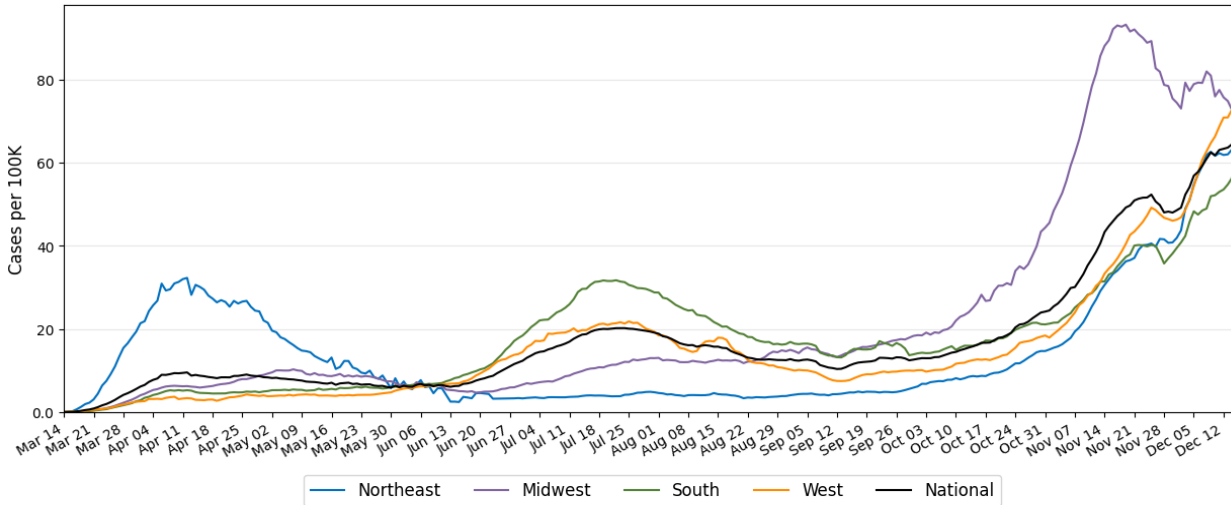


**Source:** CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.

# TIME SERIES BY CENSUS REGION

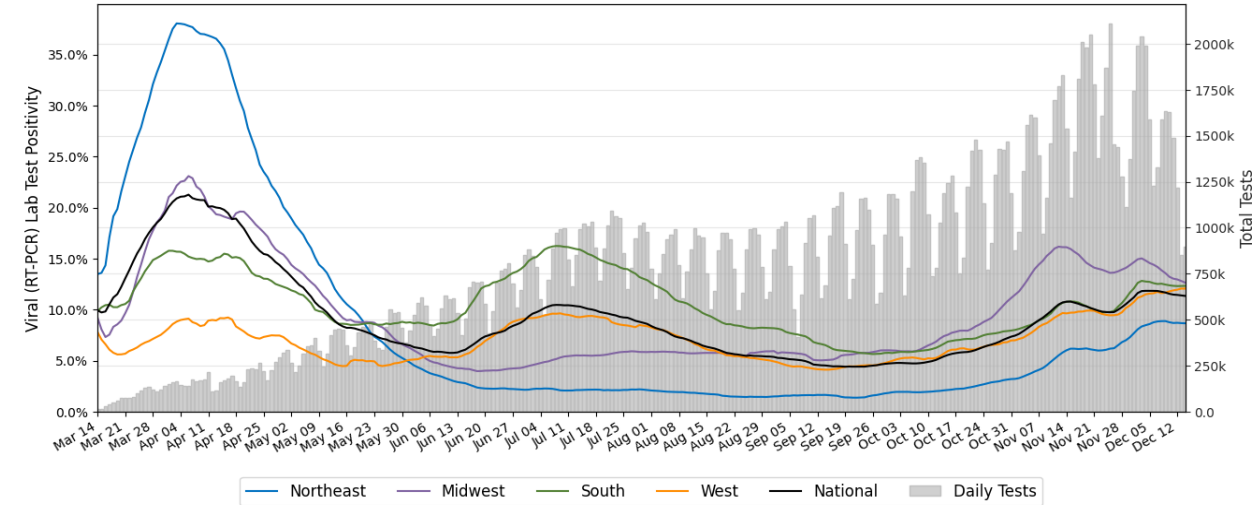
**New Cases per 100K (7-day average)**

Data as of 12/18/2020



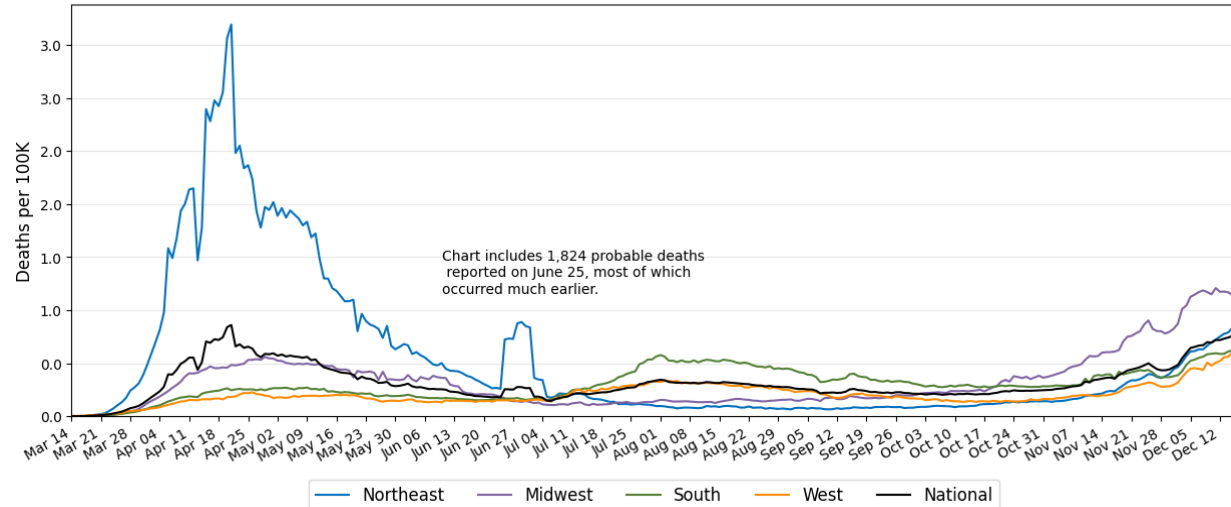
**Viral (RT-PCR) Lab Test Positivity (7-day average)**

Data as of 12/18/2020



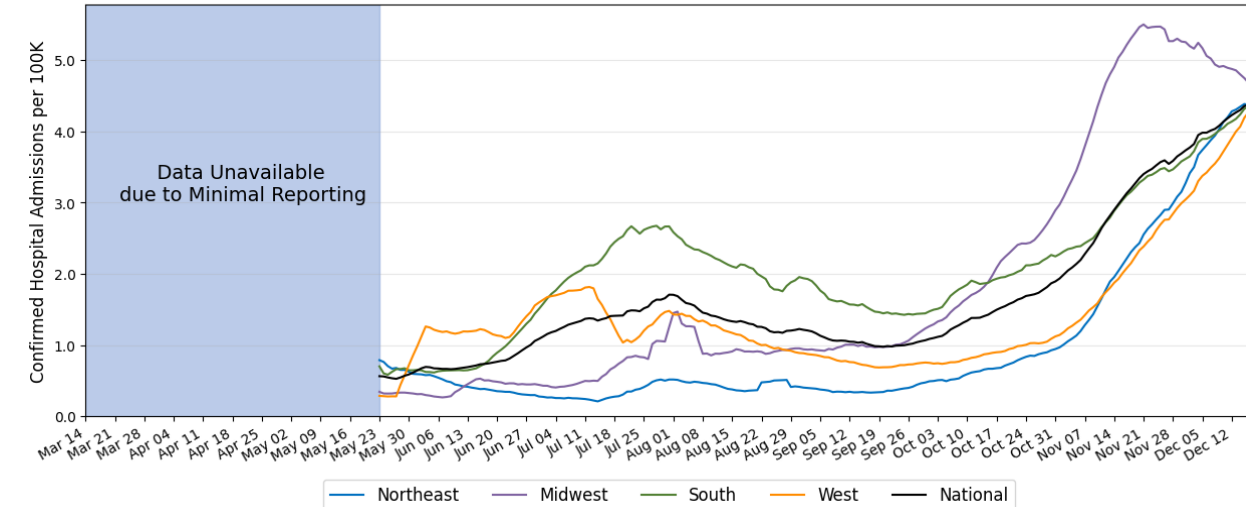
**New Deaths per 100K (7-day average)**

Data as of 12/18/2020



**New Confirmed Hospital Admissions per 100K (7-day average)**

Data as of 12/18/2020



**Source:** CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.

See <https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-regions-and-divisions-of-the-united-states.html> for census regions.

# NUMBER OF NEW CASES AND DEATHS IN THE LAST 7 DAYS

**Total Cumulative Cases: 17,233,717**

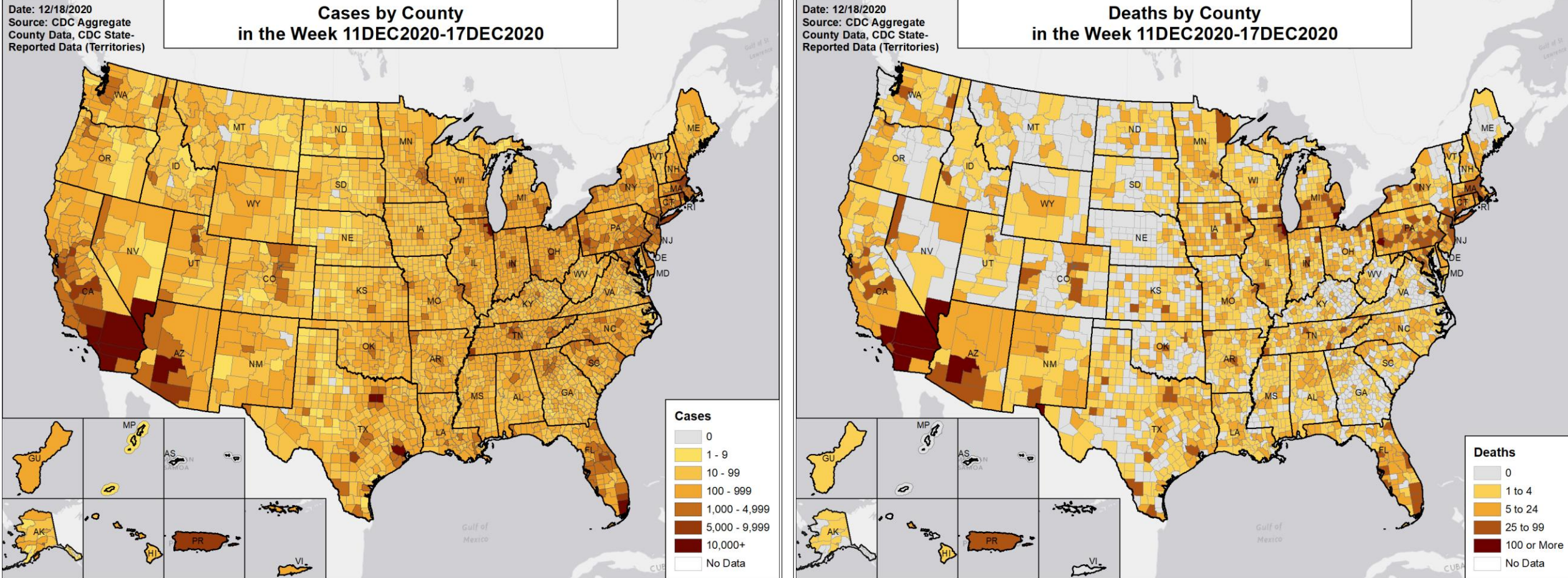
**New Cases in Last 7 Days: 1,517,167**

**Percent Change from Previous 7 Days: +2.1%**

**Total Cumulative Deaths: 310,986**

**New Deaths in Last 7 Days: 18,709**

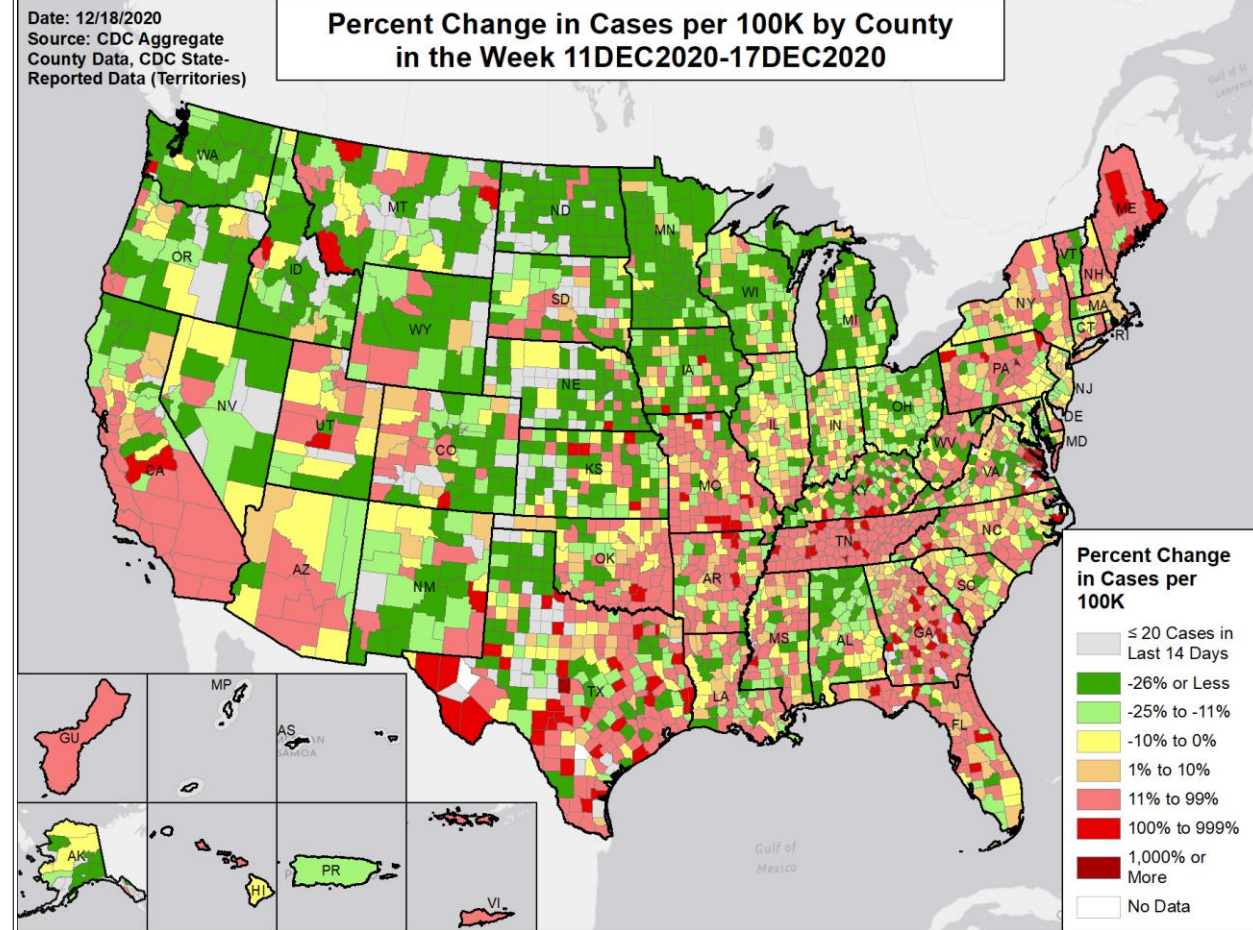
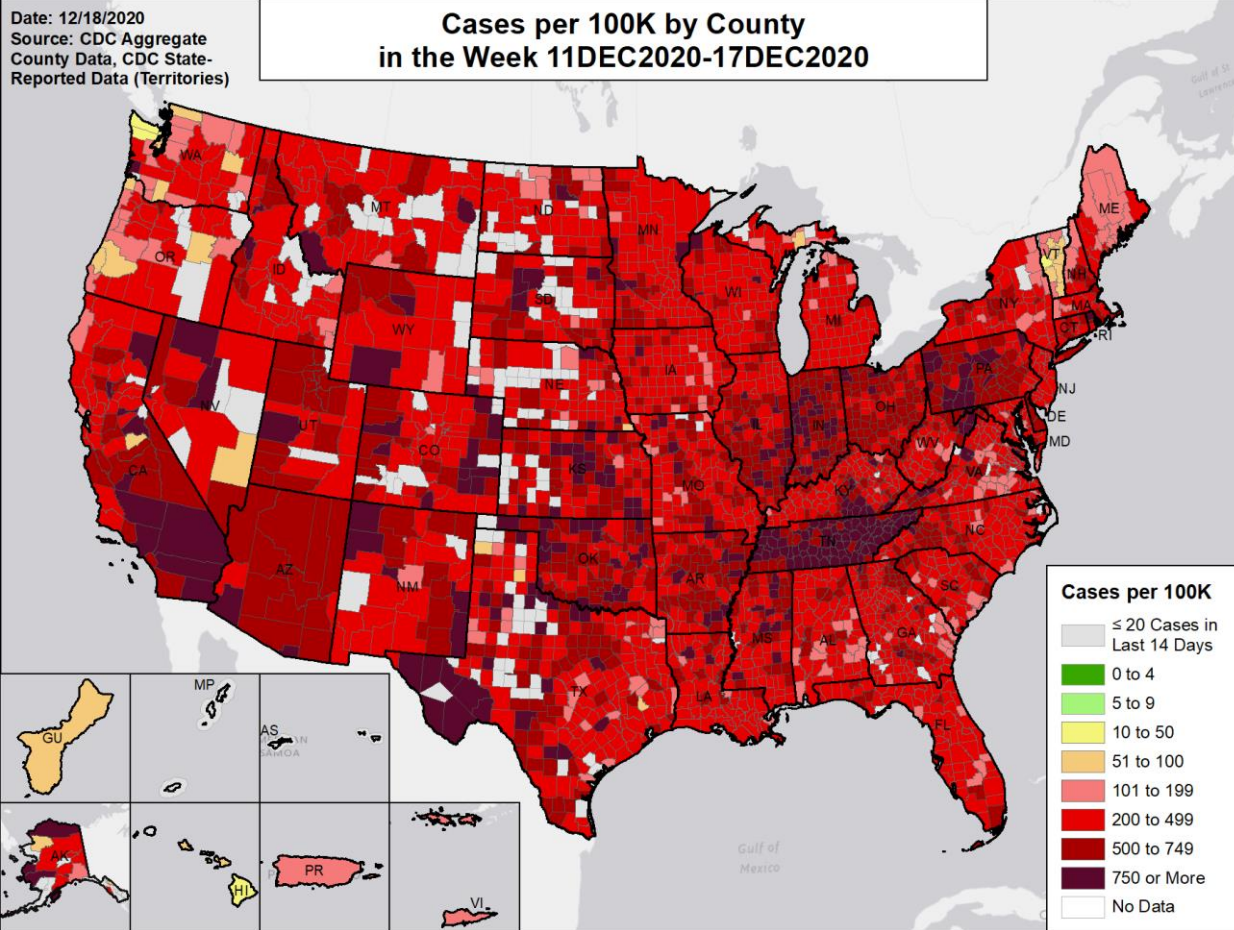
**Percent Change from Previous 7 Days: +18.1%**



# CASE INCIDENCE IN LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Incidence Rate in the Last 7 Days: 457.2 per 100,000

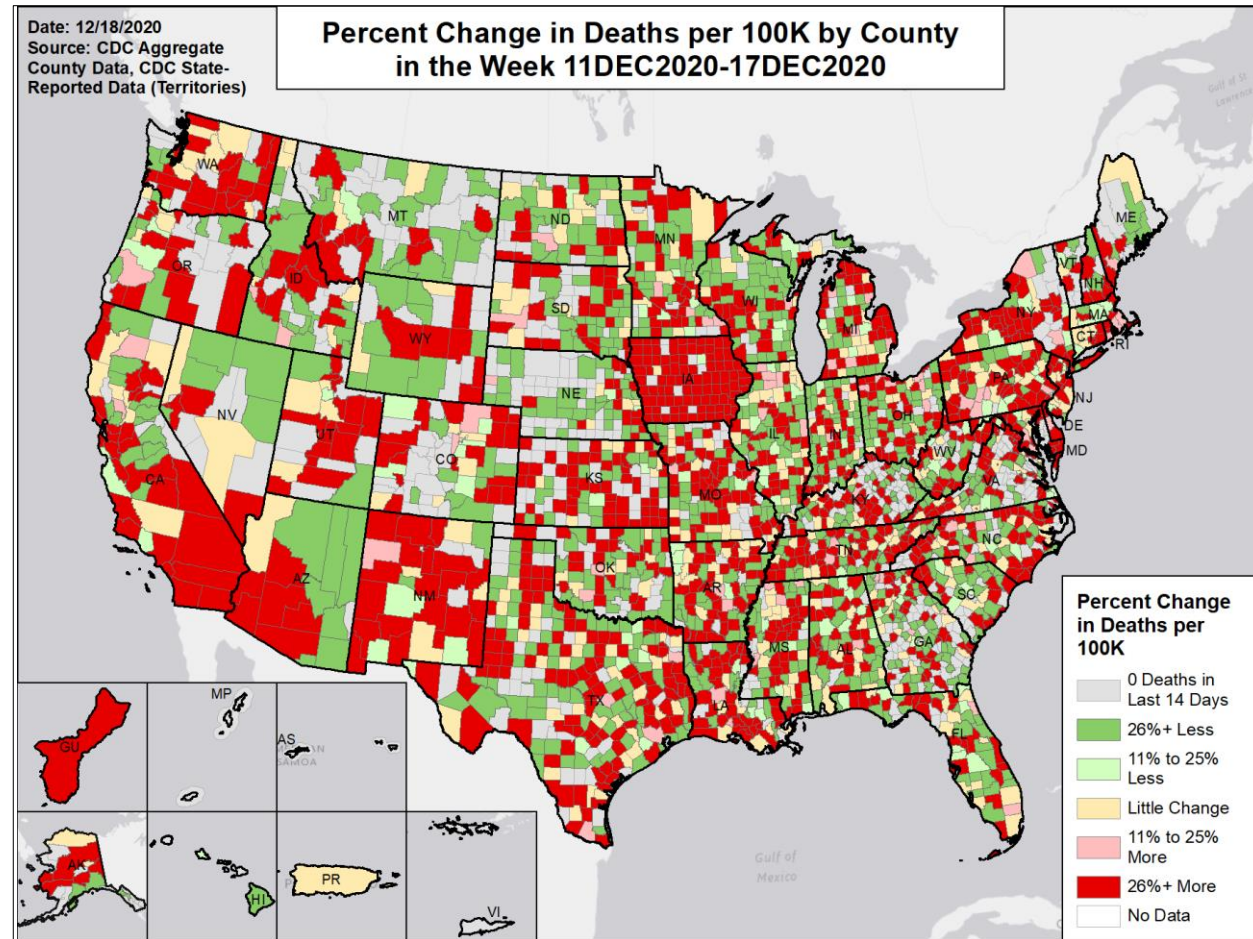
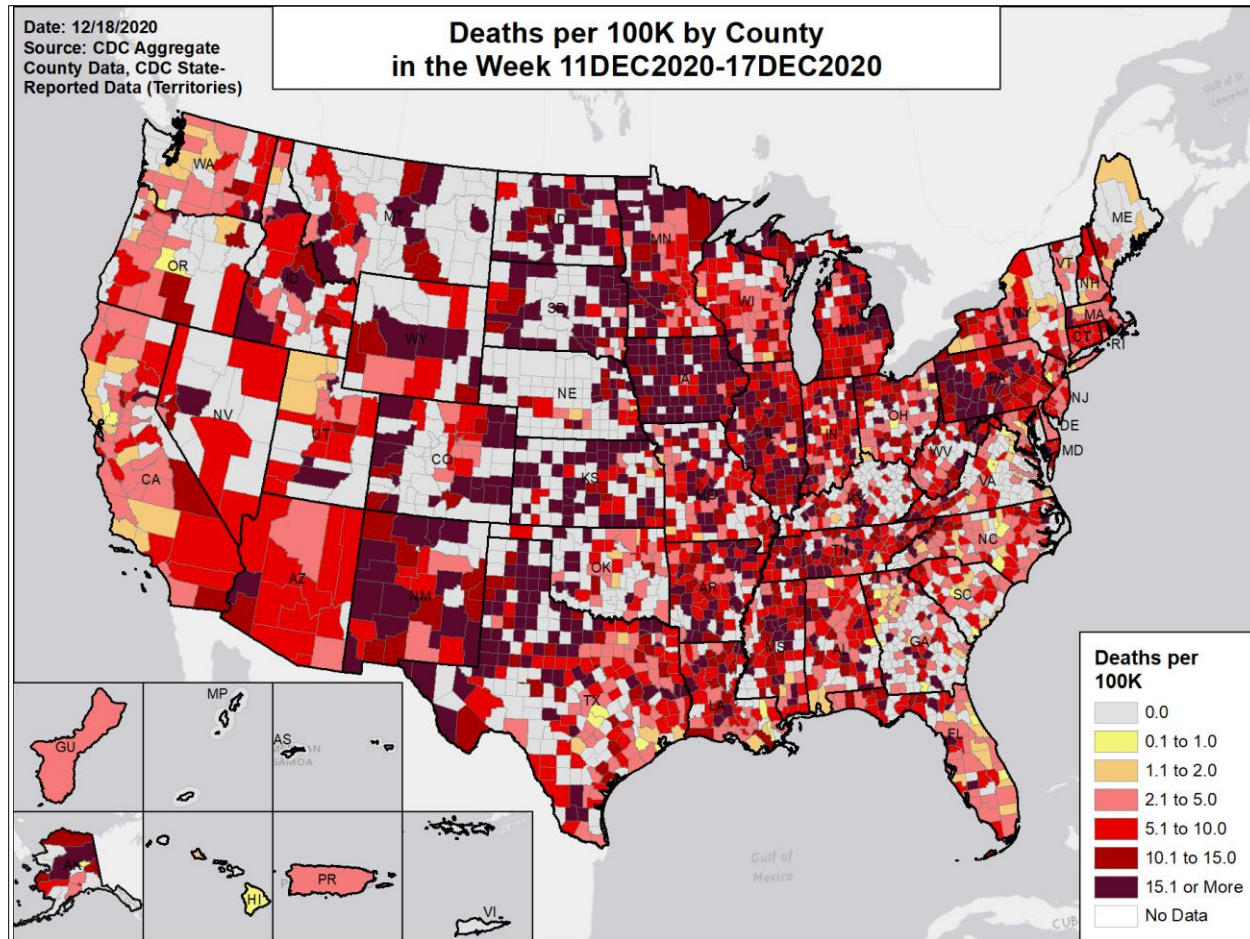
Percent Change from Previous 7 Days: +2.1%



# MORTALITY RATE IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

**Mortality Rate in the Last 7 Days: 5.6 deaths per 100,000**

**Percent Change from Previous 7 Days: +18.1%**



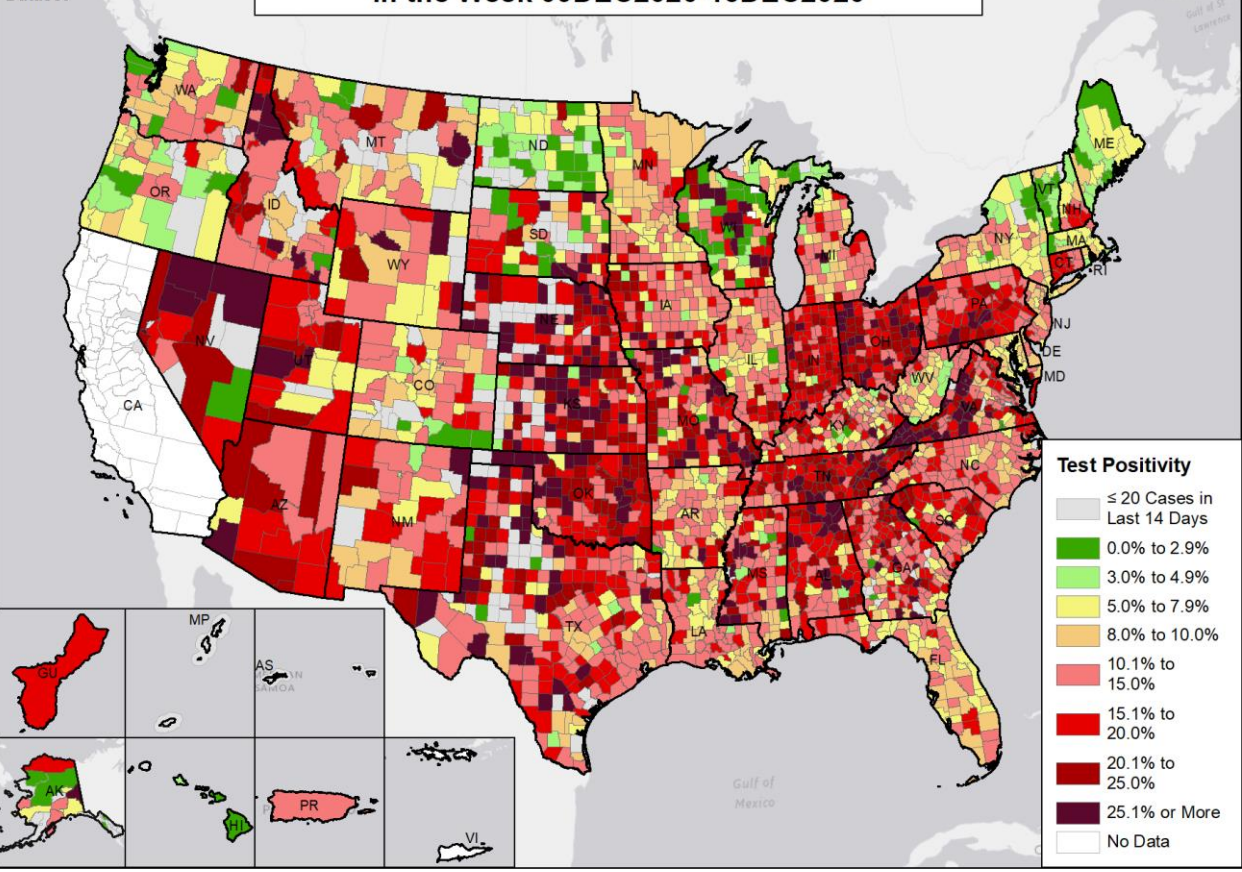
# VIRAL (RT-PCR) LAB TEST POSITIVITY IN THE LAST 7 DAYS AND COMPARISON TO PREVIOUS 7 DAYS

**Viral (RT-PCR) Lab Test Positivity in Last 7 Days: 11.3%**

**Absolute Change from Previous 7 Days: -0.4%**

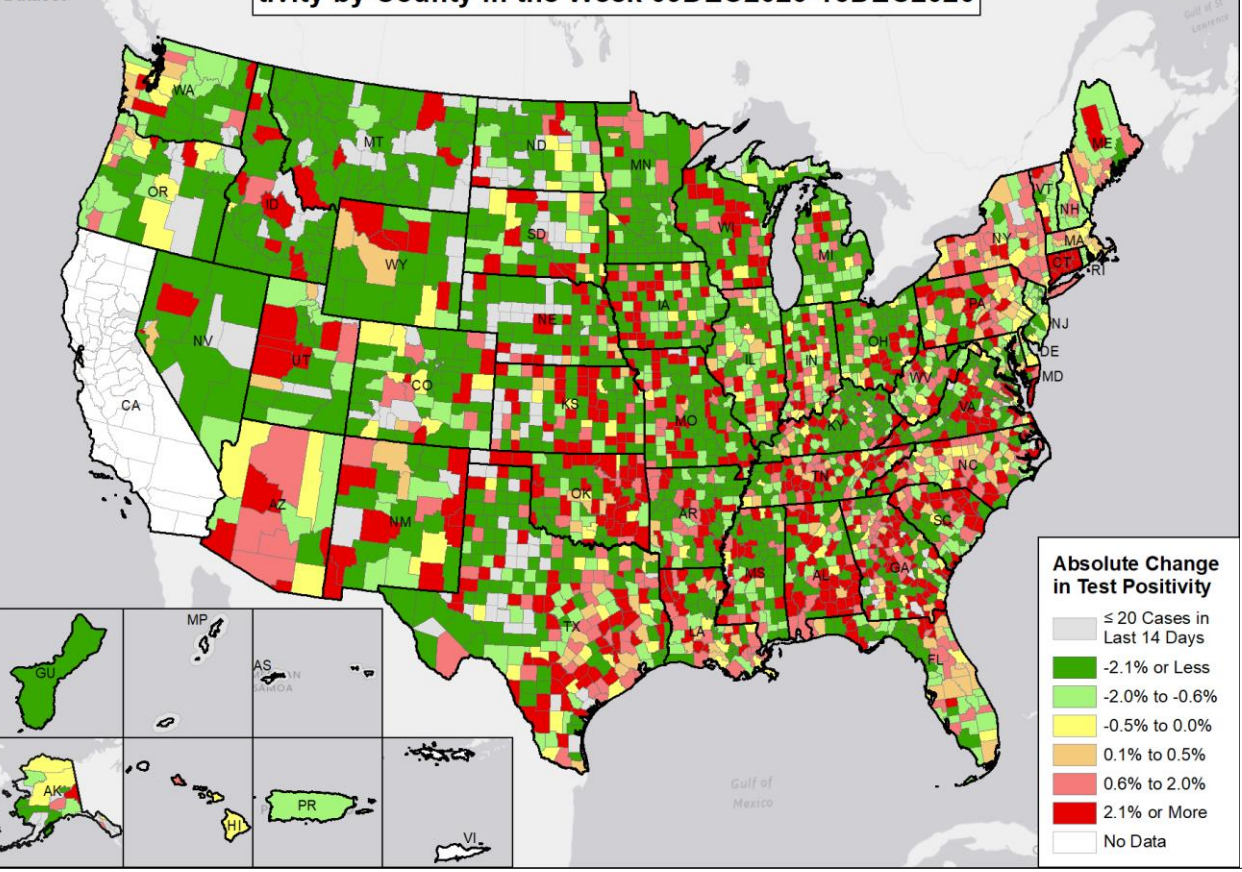
Date: 12/18/2020  
Source: Unified Testing Dataset

**Viral (RT-PCR) Lab Test Positivity by County in the Week 09DEC2020-15DEC2020**



Date: 12/18/2020  
Source: Unified Testing Dataset

**Absolute Change in Viral (RT-PCR) Lab Test Positivity by County in the Week 09DEC2020-15DEC2020**



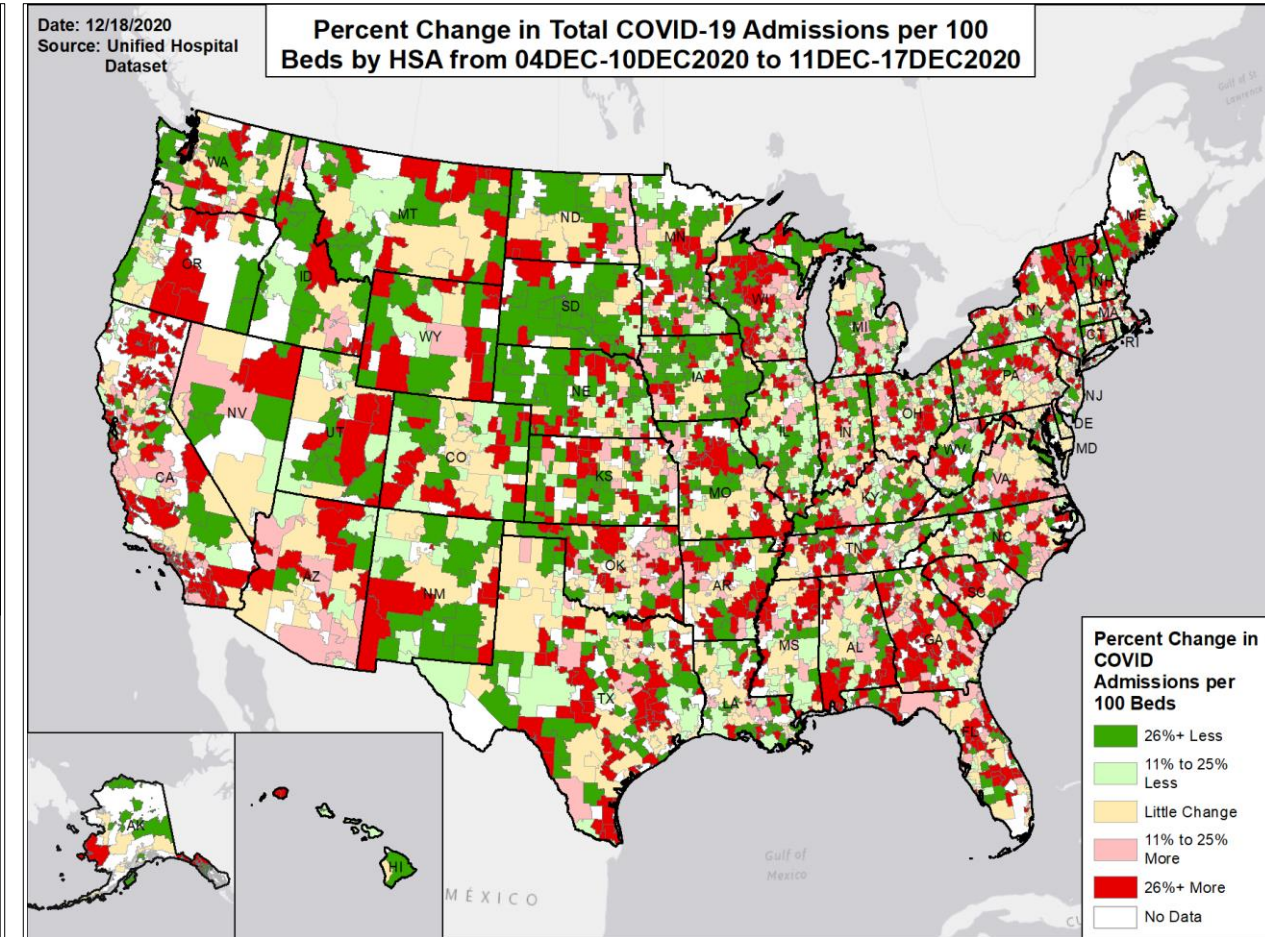
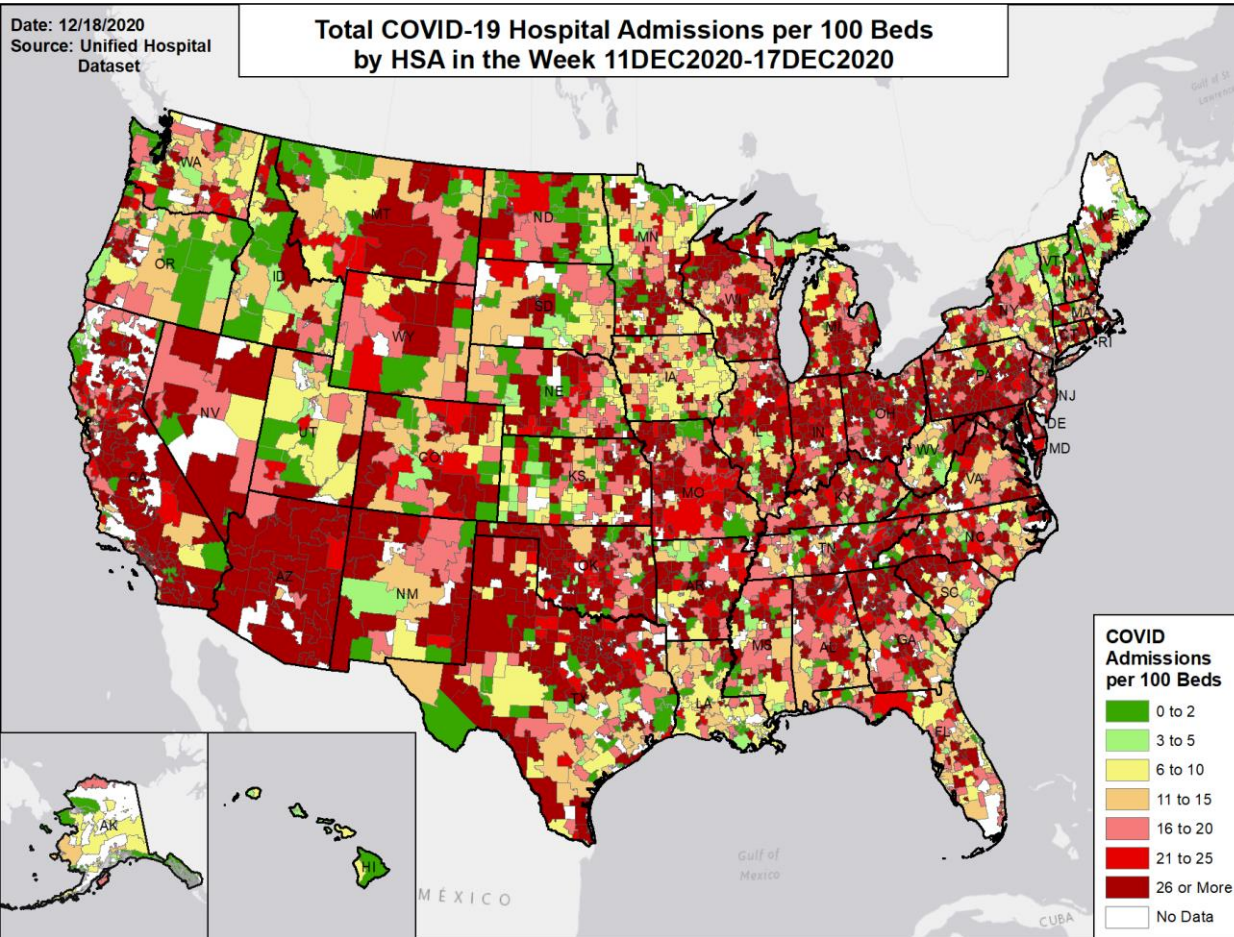
WY and OH county-level test information is provided directly to the federal government and is missing a significant proportion of known state tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states. ME, MO, OK, PR, and WA test information at the county and state levels is provided directly to the federal government and may underestimate the total number of tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.

CA, DC, WI, and VI testing data have not been reported to the federal level since 12/13 or earlier (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity. CT and WI testing reporting is low this week, which may result in inaccuracies.

# HOSPITAL ADMISSIONS IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Total COVID-19 Hospital Admissions in Last 7 Days: 155,678

Percent Change from Previous 7 Days: +2.5%

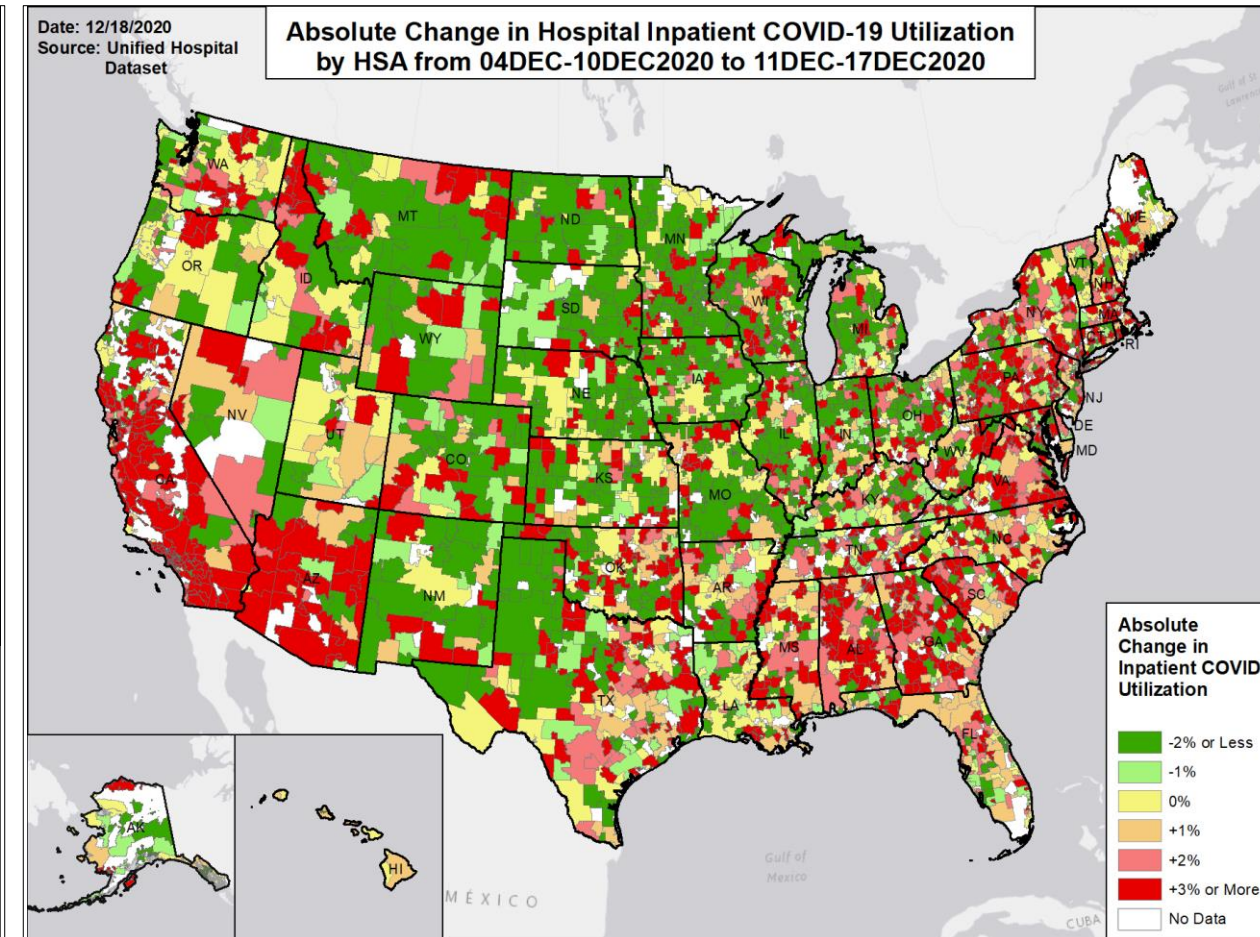
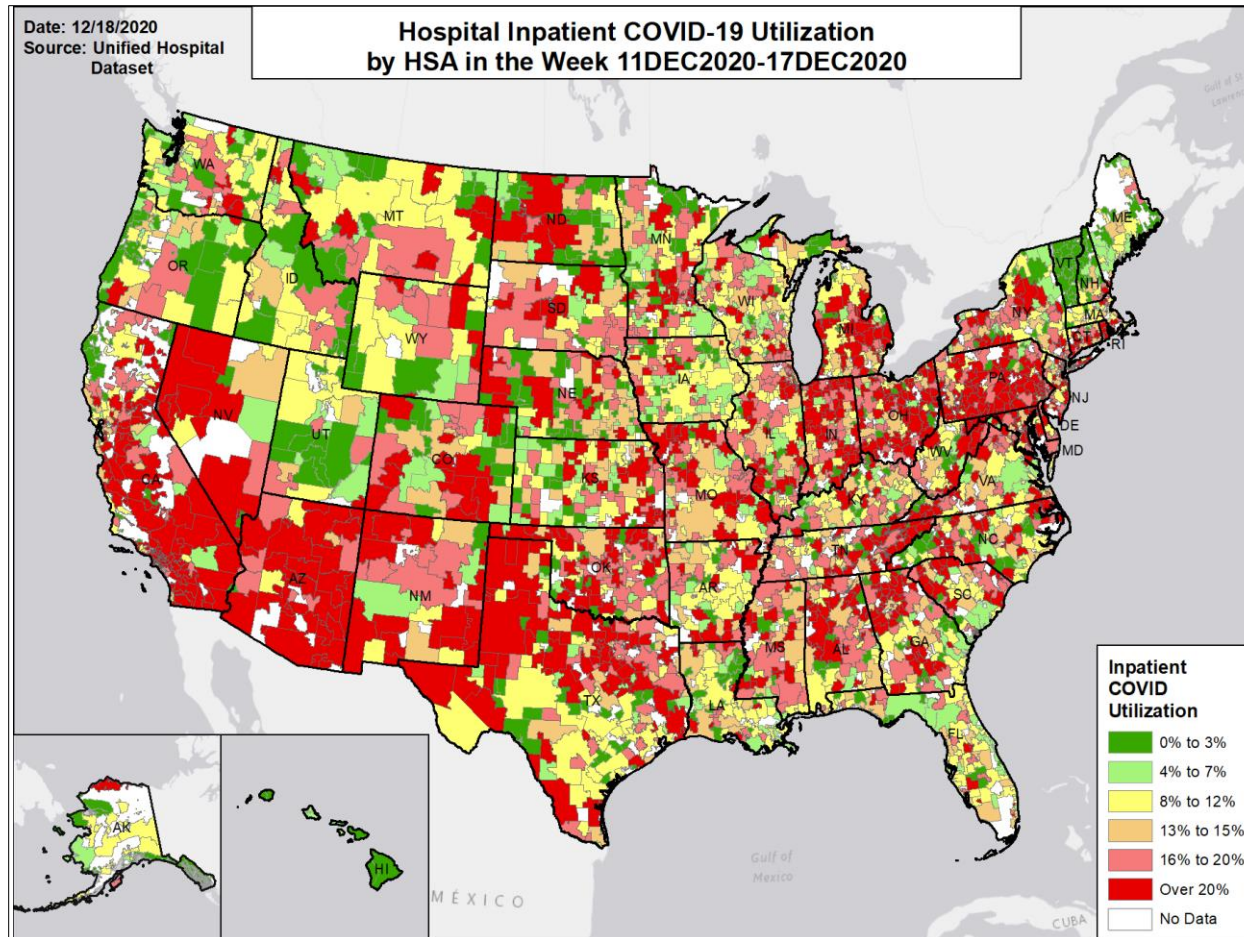


**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Total COVID-19 admissions are the sum of confirmed and suspected daily admissions reported within the last 7 days. Denominator of per 100 beds calculation is the sum of average staffed inpatient bed count reported by hospitals within the geographic region and time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate.

# HOSPITAL INPATIENT COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

**Average COVID-19 Hospital Inpatients in Last 7 Days:**  
116,343

**Percent Change from Previous 7 Days: +7.1%**

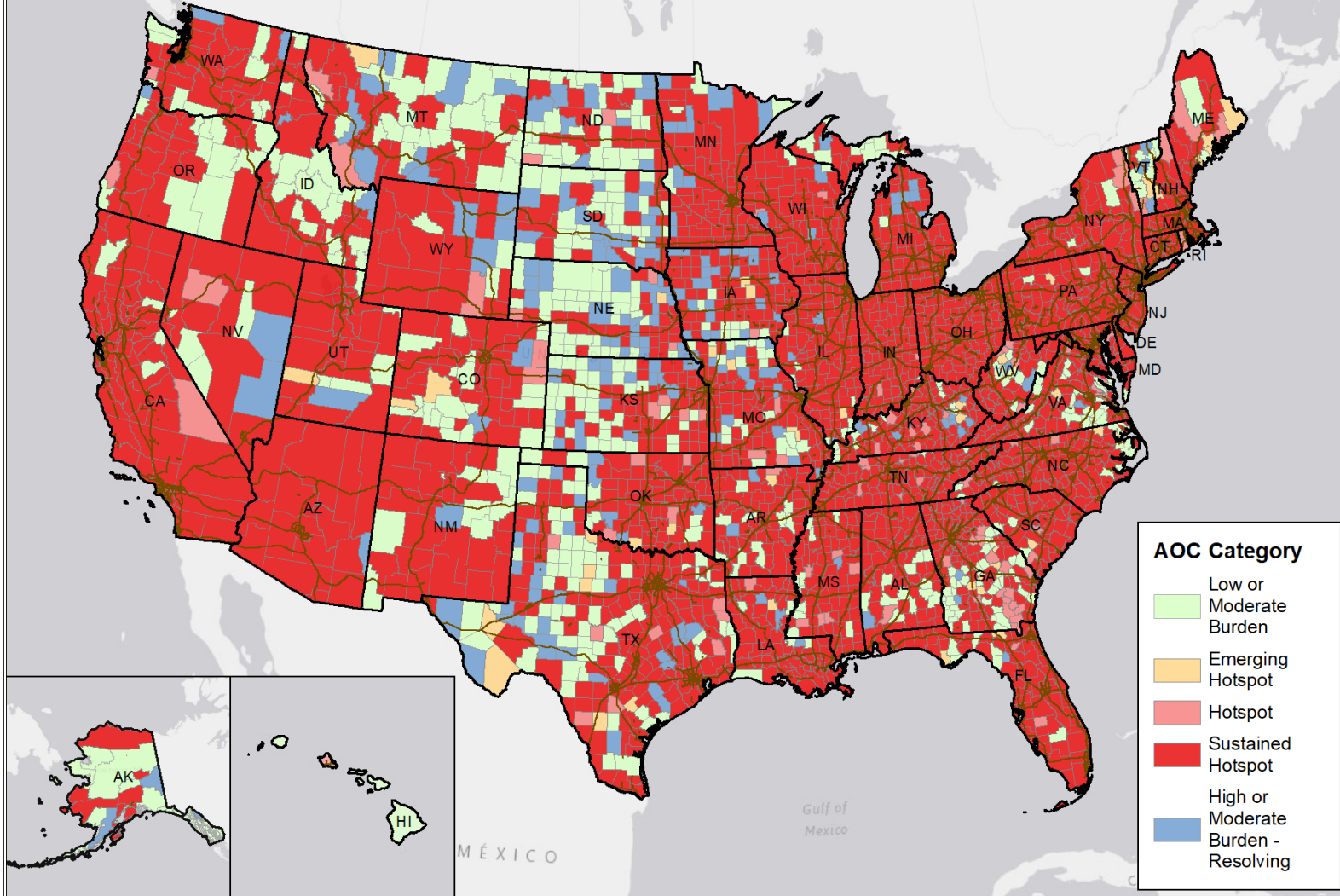


**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. COVID-19 inpatient utilization indicates average percentage of staffed inpatient beds occupied by COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.

# AREA OF CONCERN CONTINUUM

Date: 12/18/2020

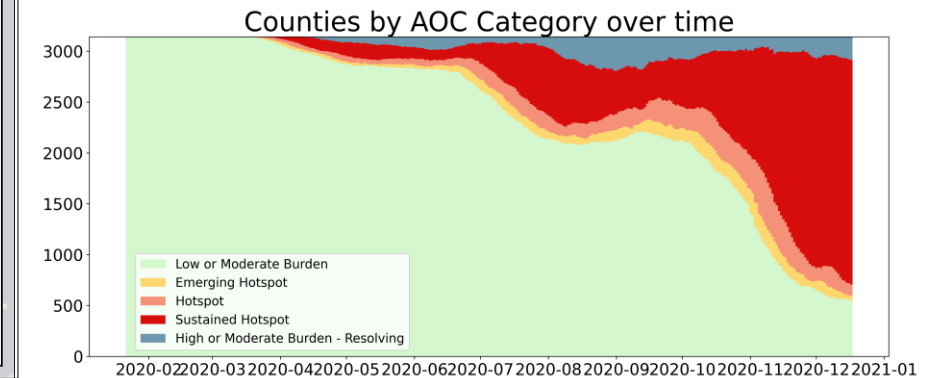
## Area of Concern Continuum by County 17DEC2020



The Areas of Concern Continuum (AOCC) is used to describe communities as they progress through stages of the epidemic. There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

- (1) **Low Burden** – communities with minimal activity
- (2) **Moderate Burden** – communities with moderate disease activity
- (3) **Emerging Hotspot** – communities with a high likelihood to become hotspots in the next 1-7 days
- (4) **Hotspot** – communities that have reached a threshold of disease activity considered as being of high burden
- (5) **Sustained Hotspot** – communities that have had a high sustained case burden and may be higher risk for experiencing healthcare resource limitations
- (6) **High Burden – Resolving** – communities that were recently identified as hotspots and are now improving
- (7) **Moderate Burden – Resolving** – communities that have a moderate level of burden, but are demonstrating improvement

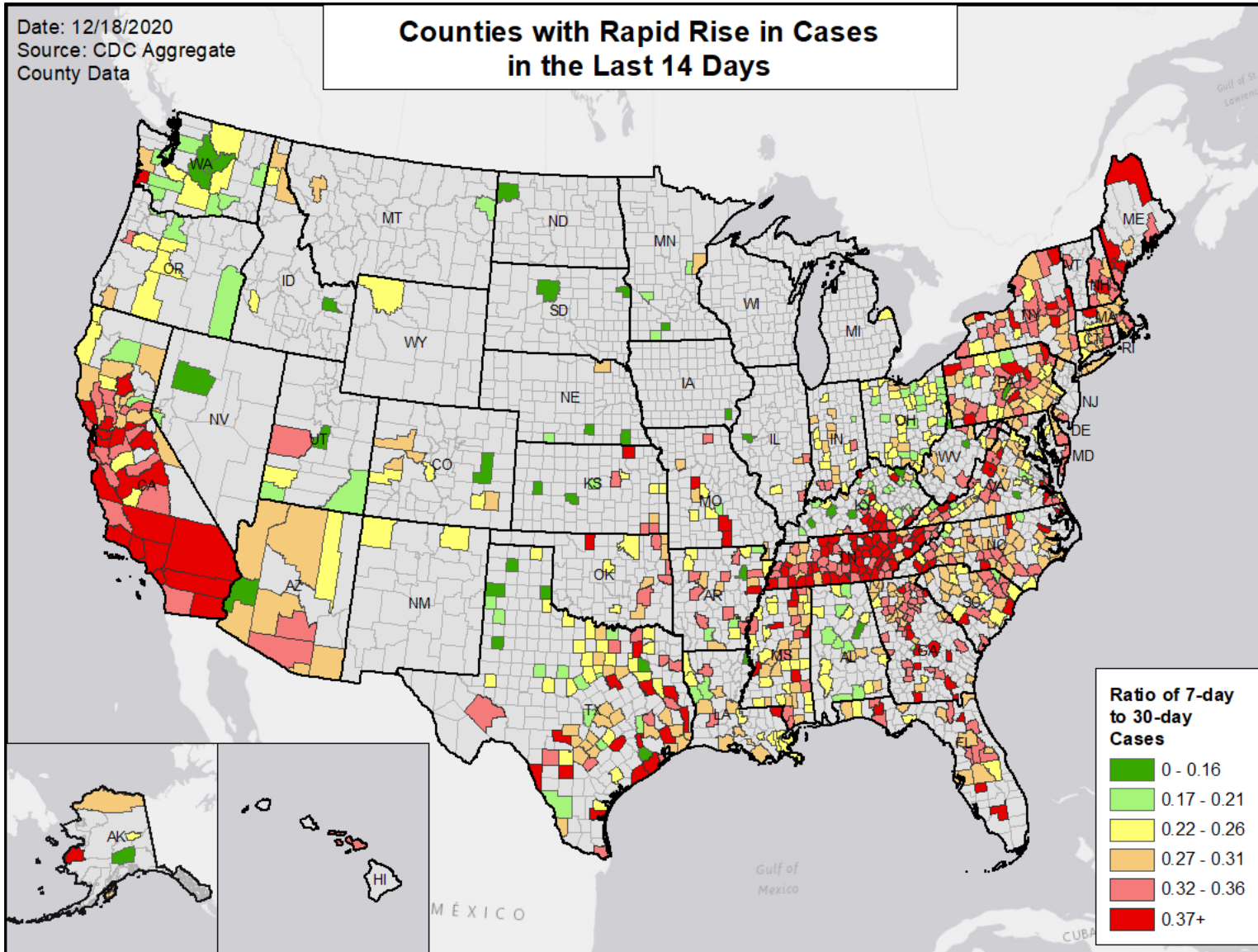
See Data Sources/Methods slides for more information.



# AREA OF CONCERN CONTINUUM – RAPID RISER COUNTIES

Date: 12/18/2020  
Source: CDC Aggregate County Data

## Counties with Rapid Rise in Cases in the Last 14 Days



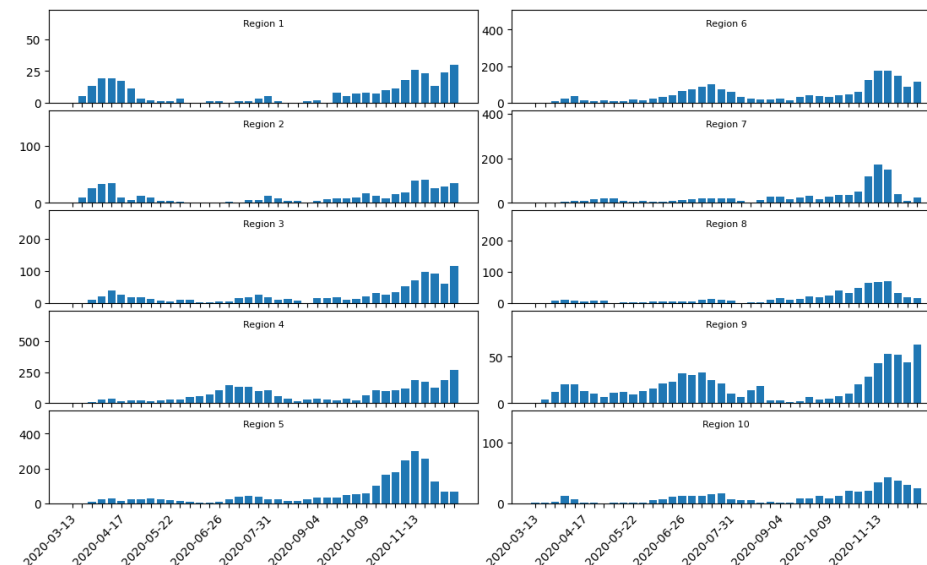
This map shows counties that have seen a rapid rise in cases within the last 14 days by meeting the following **Rapid Riser County** criteria:

- >100 new cases in last 7 days
- >0% change in 7-day incidence
- >-60% change in 3-day incidence
- 7-day incidence / 30-day incidence ratio >0.31
- one or both of the following triggering criteria: (a) >60% change in 3-day incidence, (b) >60% change in 7-day incidence.

The color indicates *current* acceleration in cases (ratio of 7-day to 30-day cases). Counties in **light red** and **red** are continuing to see accelerating cases in the most recent week, while those in **dark green** and **green** may have seen declines in the most recent week.

The bar charts below show the history of rapid riser counties by FEMA region and week, indicating when different geographic areas have seen the greatest acceleration in cases.


### # of Distinct Rapid Riser Counties by Week and FEMA Region (vertical axis scaled to number of counties in region)



Week (date shows end of 7-day period)





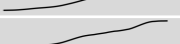





# NATIONAL AND REGIONAL METRICS

## National Metrics

	Last 7 days				Change from previous week				Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Deaths (per 100k)	Percent change in cases	Absolute change in test pos.	Percent change in conf. adm. per 100 beds	Percent change in deaths	
U.S. Total – Last 7 Days	1,517,167 (457)	11.3%	100,917 (14)	18,709 (5.6)	+2%	-0.4%	+5%	+18%	
U.S. Total – 1 Week Ago	1,486,629 (448)	11.8%	95,937 (13)	15,846 (4.8)	+17%	+0.6%	+8%	+23%	
U.S. Total – December Peak	1,517,167 (457)	11.8%	101,382 (14)	18,709 (5.6)					
U.S. Total – November Peak	1,239,974 (374)	10.9%	85,599 (12)	11,520 (3.5)					
U.S. Total – October Peak	560,532 (169)	7.3%	43,965 (6)	5,773 (1.7)					
U.S. Total – September Peak	306,086 (92)	5.4%	28,194 (4)	6,222 (1.9)					
U.S. Total – August Peak	440,083 (133)	8.4%	39,604 (6)	8,130 (2.5)					
U.S. Total – July Peak	469,736 (142)	10.5%	39,646 (6)	7,863 (2.4)					
U.S. Total – June Peak	291,217 (88)	9.0%	25,254 (4)	7,289 (2.2)					
U.S. Total – May Peak	199,365 (60)	13.6%	N/A	13,593 (4.1)					
U.S. Total – April Peak	222,605 (67)	21.3%	N/A	15,609 (4.7)					

*Last 7 days indicates cases/deaths/admissions data from 12/11-12/17 and testing data from 12/9-12/15.*

## Regional Metrics

FEMA Region	Population	Last 7 days				Change from previous week				Daily case trend – last 8 weeks
		Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Deaths (per 100k)	Percent change in cases	Absolute change in test pos.	Percent change in conf. adm. per 100 beds	Percent change in deaths	
9	51,555,755	338,444 (656)	17.7%	18,610 (21)	2,326 (4.5)	+29%	+6.5%	+24%	+42%	
4	66,908,139	295,848 (442)	12.3%	21,278 (14)	2,782 (4.2)	+13%	-0.5%	+11%	+8%	
5	52,542,063	242,632 (462)	12.1%	17,123 (14)	4,035 (7.7)	-20%	-1.4%	-6%	-0%	
6	42,716,279	176,785 (414)	13.2%	13,701 (14)	2,250 (5.3)	+8%	+0.4%	+4%	+12%	
3	30,854,848	132,078 (428)	13.0%	9,427 (13)	2,102 (6.8)	-1%	-0.3%	+3%	+23%	
2	31,635,850	111,792 (353)	7.4%	8,626 (11)	1,376 (4.3)	+1%	-0.4%	+3%	+41%	
1	14,845,063	69,490 (468)	6.6%	3,262 (10)	770 (5.2)	+3%	-0.3%	+7%	+6%	
7	14,140,220	58,348 (413)	15.2%	4,262 (12)	1,645 (11.6)	-11%	-1.7%	-9%	+88%	
8	12,258,952	55,258 (451)	10.3%	2,995 (12)	927 (7.6)	-20%	-3.0%	-13%	+4%	
10	14,351,240	36,492 (254)	9.1%	1,633 (7)	496 (3.5)	-26%	-1.5%	-4%	+22%	

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# STATE PROFILES AND WEEKLY CATEGORIES

Weekly Categorization of States/DC: color categories based on last week's test positivity data (baseline dates: December 3-9)  
Case Data from December 11-17, Test Positivity Data from December 9-15

## Red States

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test positivity	Pct. change in conf. adm. per 100 beds	
OK	22,751 (575)	20.5%	2,245 (24)	+6%	+0.6%	9%	
NV	17,852 (580)	20.3%	1,321 (18)	-6%	-2.0%	12%	
ID	8,850 (495)	19.2%	392 (12)	-24%	-4.7%	-4%	
TN	64,257 (941)	18.5%	2,443 (15)	+58%	+0.9%	11%	
AZ	47,507 (653)	18.5%	3,257 (23)	+16%	+1.8%	5%	
AL	18,058 (368)	18.2%	2,434 (17)	-22%	+1.1%	20%	
CT	17,123 (480)	N/A	979 (12)	+2%	N/A	-0%	
VA	25,056 (294)	16.5%	1,537 (9)	-6%	-1.0%	11%	
MO	25,961 (423)	16.5%	2,018 (13)	+13%	-1.2%	-5%	
NE	7,643 (395)	16.3%	485 (10)	-31%	-2.2%	-15%	
IN	42,255 (628)	16.2%	2,611 (16)	-7%	-0.9%	-2%	
KS	15,086 (518)	15.8%	1,098 (14)	-15%	-2.0%	-3%	
UT	18,022 (562)	15.4%	549 (10)	-8%	-2.8%	-11%	
PA	72,637 (567)	15.3%	5,232 (16)	+4%	-0.5%	2%	
SC	19,655 (382)	15.2%	1,245 (13)	+0%	-0.0%	24%	
MS	14,949 (502)	14.7%	1,043 (13)	+7%	-1.8%	7%	
OH	64,328 (550)	14.5%	4,806 (16)	-24%	-1.4%	-1%	
NH	5,991 (441)	13.9%	251 (9)	+13%	-1.1%	-10%	
TX	109,027 (376)	13.5%	8,308 (13)	+11%	+0.5%	5%	
NM	11,314 (540)	13.3%	803 (21)	-5%	-0.9%	-13%	
GA	42,995 (405)	13.2%	3,318 (18)	+15%	+0.6%	5%	
IA	9,658 (306)	12.7%	661 (8)	-30%	-1.8%	-23%	
SD	4,471 (505)	12.7%	218 (9)	-17%	-3.9%	-32%	
KY	20,571 (460)	12.1%	3,038 (25)	-10%	-3.2%	3%	
NC	41,577 (396)	11.5%	2,297 (11)	+7%	+0.1%	9%	
AR	15,689 (520)	11.4%	1,079 (14)	+8%	-0.8%	12%	
MT	4,617 (432)	11.2%	396 (14)	-20%	-6.1%	-4%	
IL	55,897 (441)	11.0%	3,569 (12)	-13%	-1.2%	-6%	
MI	32,636 (327)	10.7%	2,762 (13)	-26%	-2.5%	-11%	
NJ	32,724 (368)	10.5%	2,965 (15)	-8%	-1.5%	-4%	
WV	8,792 (491)	10.0%	592 (11)	+1%	-0.9%	11%	
WI	25,554 (439)	N/A	2,324 (19)	-16%	N/A	-3%	
WY	2,370 (409)	9.1%	170 (12)	-25%	-3.6%	-10%	
MN	21,962 (389)	9.1%	1,051 (11)	-35%	-2.6%	-20%	
CO	23,422 (407)	9.0%	1,480 (14)	-21%	-2.6%	-11%	

## Orange States

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test positivity	Pct. change in conf. adm. per 100 beds	
LA	18,004 (387)	10.3%	1,266 (10)	+4%	+0.6%	-8%	
FL	73,786 (344)	10.1%	5,460 (11)	+12%	+0.1%	13%	
DE	5,732 (589)	9.5%	362 (14)	+3%	-0.0%	-5%	
WA	15,031 (197)	8.5%	704 (6)	-34%	-0.8%	-2%	
MD	18,129 (300)	8.3%	1,492 (15)	-11%	-1.1%	-2%	
RI	8,043 (759)	7.9%	244 (12)	-6%	-1.4%	-9%	
OR	9,098 (216)	7.4%	437 (7)	-14%	-1.3%	-6%	
CA	272,054 (689)	N/A	13,980 (22)	+35%	N/A	31%	

The Weekly Categories slide indicates which states fell in the red, orange, yellow, light green, and dark green categories for test positivity at the beginning of the week (as of Sunday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

CA, DC, WI, and VI testing data have not been reported to the federal level since 12/13 or earlier (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity. CT and WI testing reporting is low this week, which may result in inaccuracies.

# STATE PROFILES AND WEEKLY CATEGORIES CONT.

Weekly Categorization of States/DC: color categories based on last week's test positivity data (baseline dates: December 3-9)  
Case Data from December 11-17, Test Positivity Data from December 9-15

## Yellow States

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Perc. change in cases	Abs. change in test positivity	Perc. change in conf. adm. per 100 beds	
AK	3,513 (480)	7.1%	100 (7)	-27%	-1.5%	-8%	
NY	72,227 (371)	7.0%	5,416 (11)	+4%	+0.4%	8%	
MA	34,466 (500)	6.3%	1,614 (11)	+2%	+0.1%	18%	
ME	3,131 (233)	4.6%	139 (5)	+33%	-0.6%	3%	
ND	2,356 (309)	4.2%	182 (9)	-58%	-2.2%	-25%	

## Dark Green States

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test positivity	Pct. change in conf. adm. per 100 beds	
HI	888 (63)	2.8%	40 (2)	+28%	+0.8%	-18%	

## Light Green States

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test positivity	Pct. change in conf. adm. per 100 beds	
VT	736 (118)	3.1%	35 (3)	-5%	+0.1%	29%	
DC	1,732 (245)	N/A	212 (7)	-10%	N/A	11%	

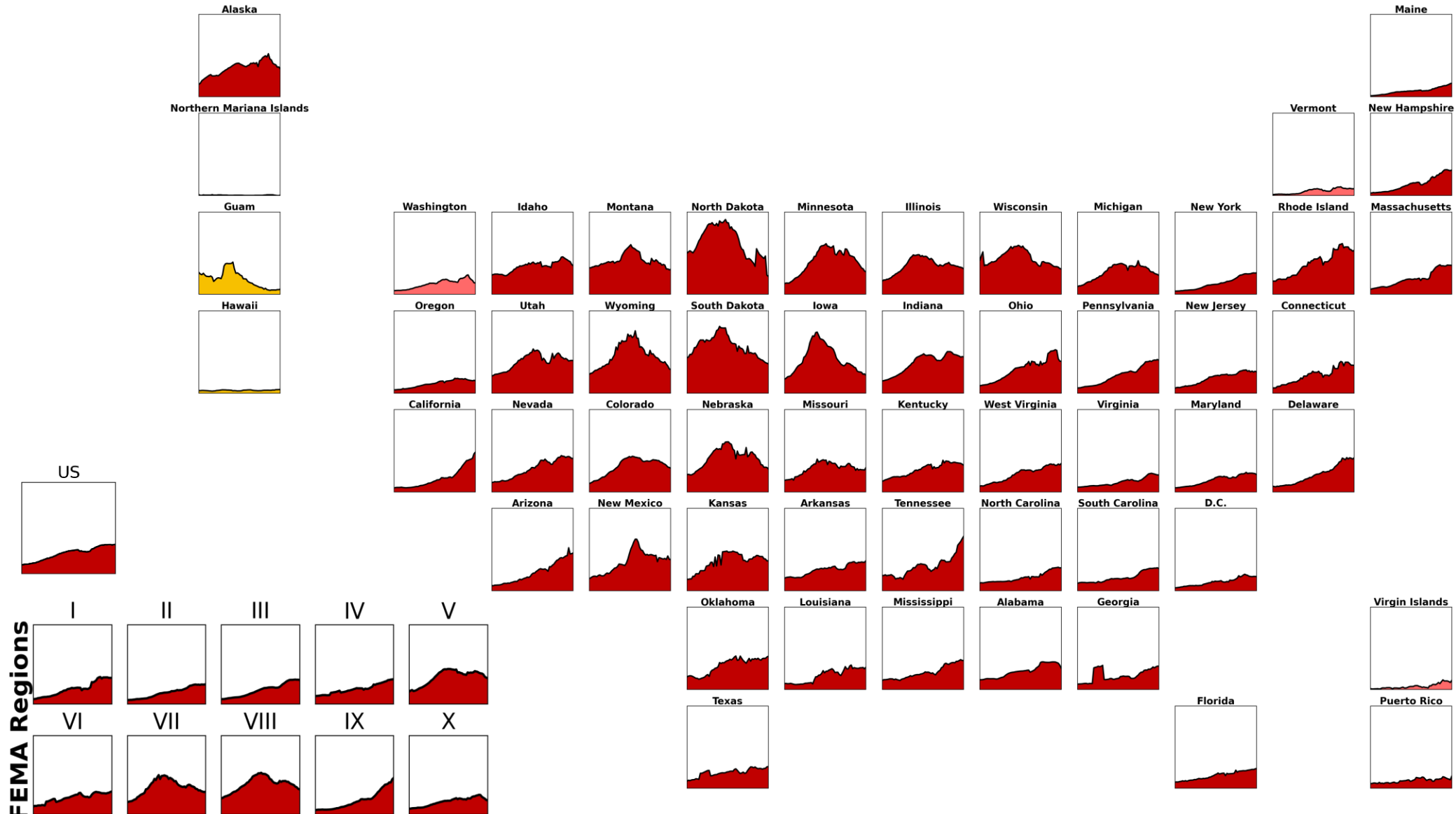
## Territories

State	Last 7 days			Change from previous week			Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in test positivity	Pct. change in conf. adm. per 100 beds	
GU	141 (88)	19.8%	12 (4)	+28%	-8.6%	-39%	
PR	6,674 (209)	10.8%	241 (3)	+25%	-0.8%	3%	
VI	167 (157)	N/A	4 (2)	+16%	N/A	inf%	
MP	2 (4)	N/A	0 (0)	-71%	N/A	N/A	
AS	0 (0)	N/A	N/A	N/A	N/A	N/A	

The Weekly Categories slide indicates which states fell in the red, orange, yellow, light green, and dark green categories for test positivity at the beginning of the week (as of Sunday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

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# TRENDS IN CASE INCIDENCE DURING THE LAST 8 WEEKS



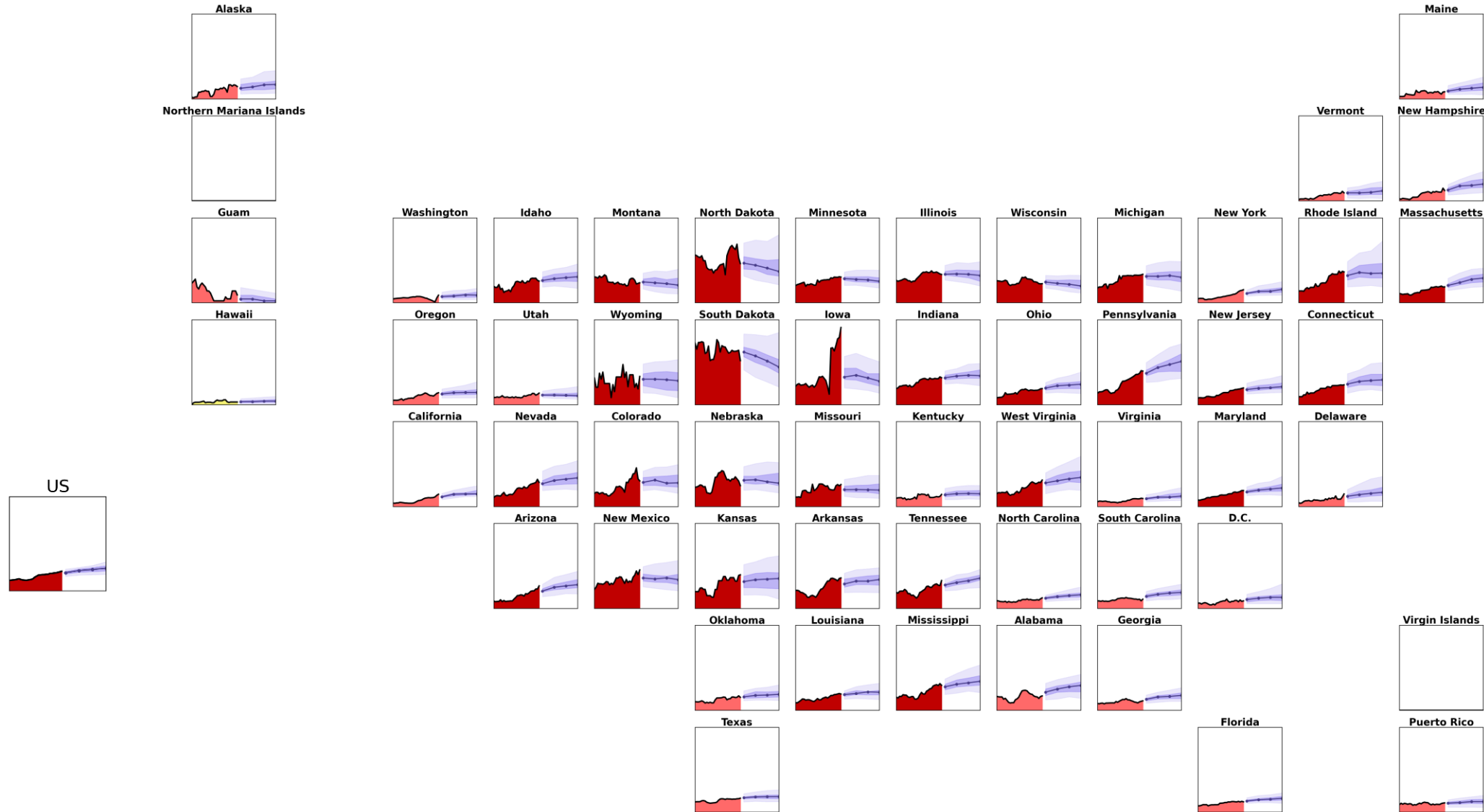
**Case incidence categories**  
(based on cases per 100,000 population in the last 7 days)

2 or less
3 - 9
10 - 50
51 - 100
101 - 199
200 or more

Figure depicts average case incidence for each state and region over the 8-week period of 10/23-12/17. Vertical axis ranges from 0 to 1,423 cases per 100,000 population (7 day total).

**Source:** CDC state-reported data. See Data Sources/Methods slides for additional details.

# TRENDS IN MORTALITY RATE DURING THE LAST 4 WEEKS AND 4 WEEK FORECAST



## Mortality rate categories

(based on deaths per 100,000 population in the last 7 days)

0.0
0.1 – 1.0
1.1 – 2.0
2.1 – 5.0
5.1 or more

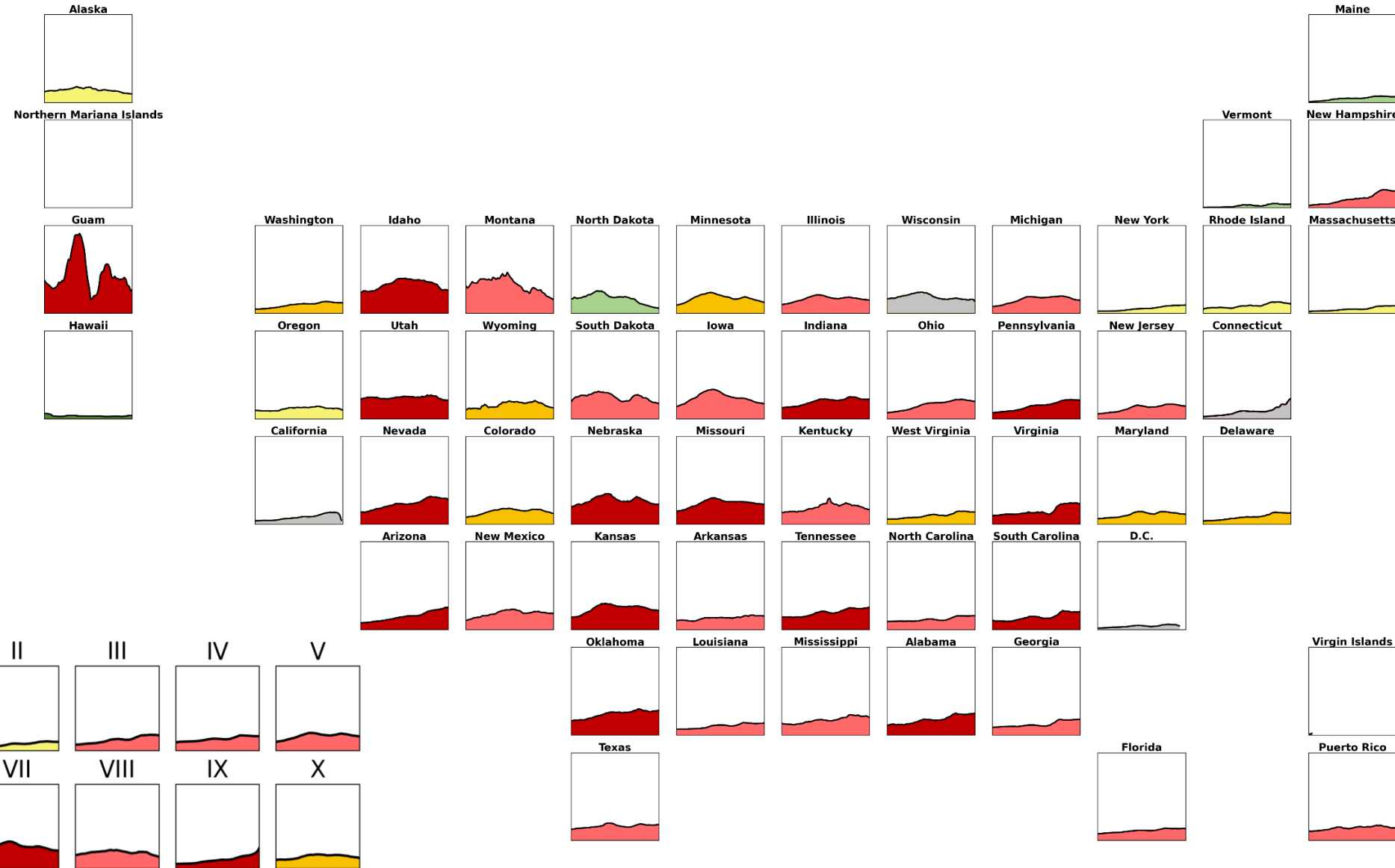
Projected Deaths  
 50% Prediction Interval  
 95% Prediction Interval

Figure depicts average mortality rate for each state over the 4-week period of 11/20-12/17 and a 4-week forecast from 12/19-1/9. Vertical axis ranges from 0 to 27 deaths per 100,000 population (7 day total).

**Source:** CDC state-reported data. See Data Sources/Methods slides for additional details.

**Forecast:** The forecast displays projected weekly death totals using an ensemble of predictive models generated by academic, private industry, and governmental groups. Models make various assumptions about the levels of social distancing and other interventions, which may not reflect recent changes in behavior. More information is available at [the CDC website](https://www.cdc.gov/coronavirus/2019-ncov/forecasting/). The forecast date is as of 12/14.

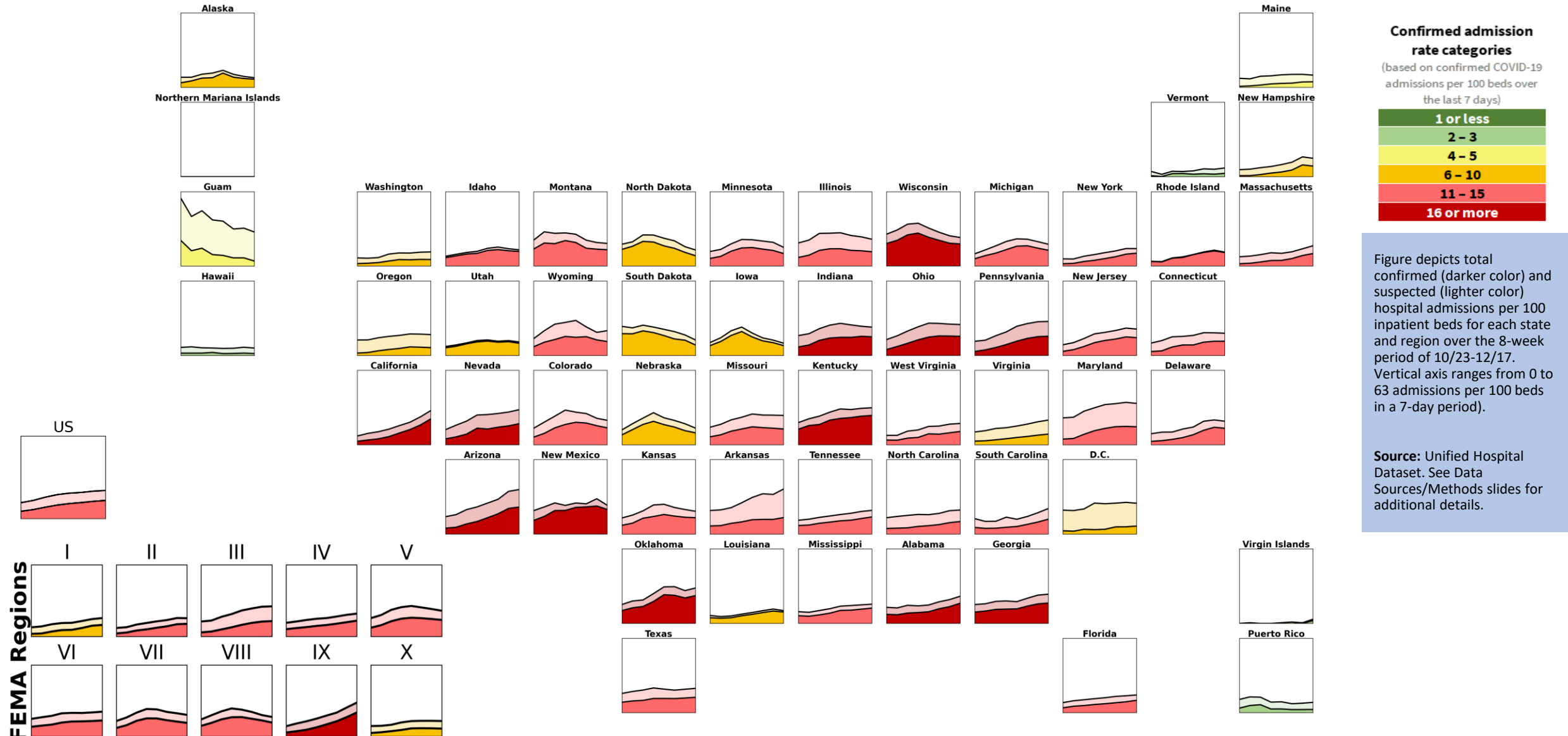
# TRENDS IN VIRAL (RT-PCR) LAB TEST POSITIVITY DURING THE LAST 8 WEEKS



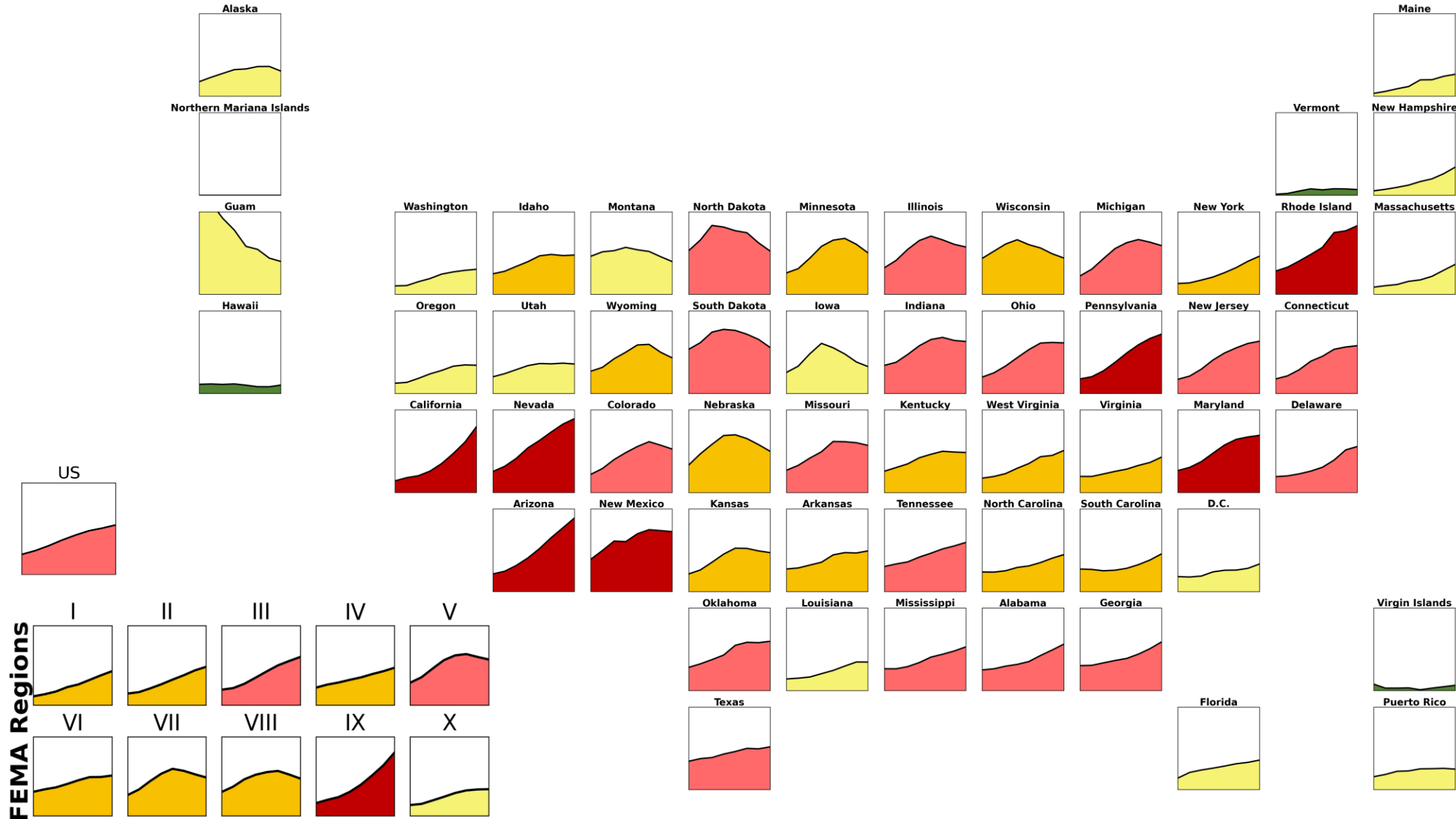
FEMA Regions

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# TRENDS IN HOSPITAL ADMISSIONS PER 100 BEDS DURING THE LAST 8 WEEKS



# TRENDS IN HOSPITAL INPATIENT COVID UTILIZATION DURING THE LAST 8 WEEKS



## Inpatient bed utilization categories

(based on average percentage of beds occupied by COVID-19 patients over the last 7 days)

3% or less
4% - 7%
8% - 12%
13% - 15%
16% - 20%
21% or more

Figure depicts average inpatient bed utilization by COVID-19 patients over the 8-week period of 10/23-12/17. Vertical axis ranges from 0 to 30%.

**Source:** Unified Hospital Dataset. See Data Sources/Methods slides for additional details.

# NATIONAL TRENDS - VIRAL (RT-PCR) LAB TEST POSITIVITY BY AGE GROUP

Tests per 100k population aged 18-24 in the last 7 days: 2,953 (-30% from previous 7 days)

Tests per 100k population aged 25-64 in the last 7 days: 2,515 (-29% from previous 7 days)

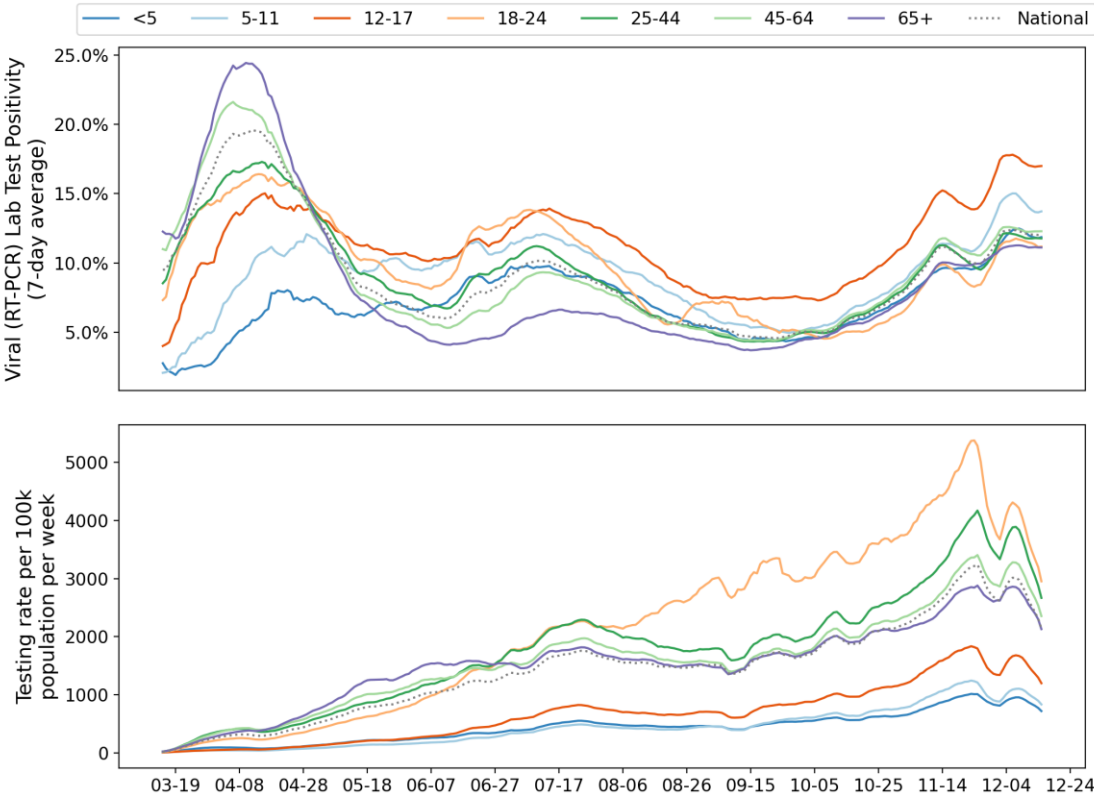
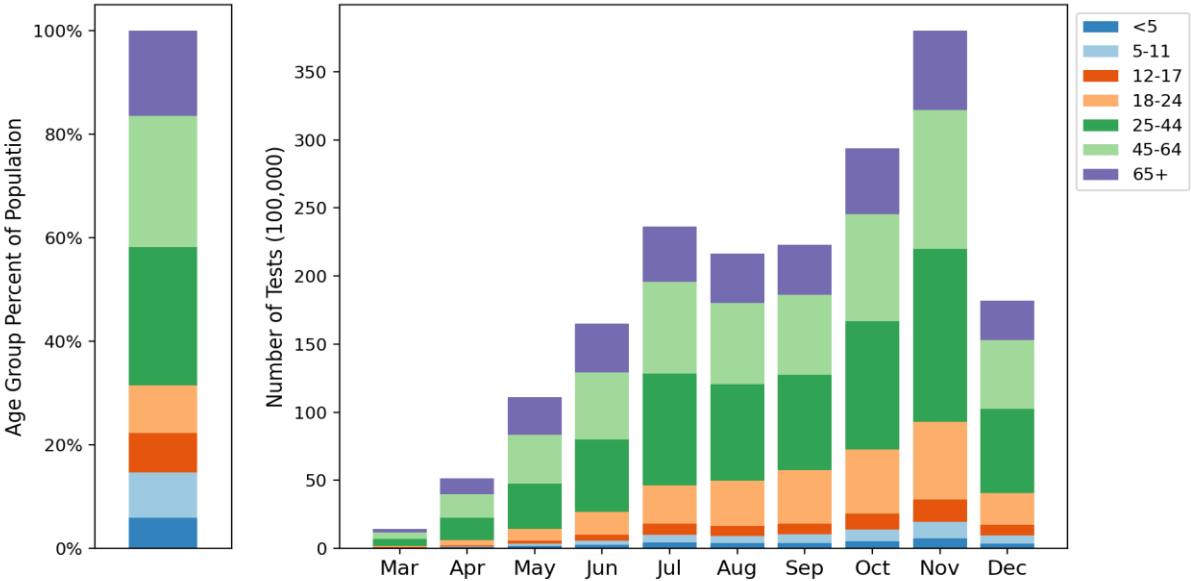
Tests per 100k population aged 65+ in the last 7 days: 2,130 (-24% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 18-24 in the last 7 days: 11.2% (-0.5% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 25-64 in the last 7 days: 12.0% (-0.2% from previous 7 days)

Viral (RT-PCR) lab test positivity for ages 65+ in the last 7 days: 11.1% (-0.2% from previous 7 days)

National Number of Tests by Age per Month



Source: COVID-19 Electronic Lab Reporting (CELR) and Federal Direct Report Testing Data, limited to records with known age over the period 3/15-12/15.

# TRENDS IN VIRAL (RT-PCR) LAB TEST POSITIVITY BY AGE GROUP AND REGION

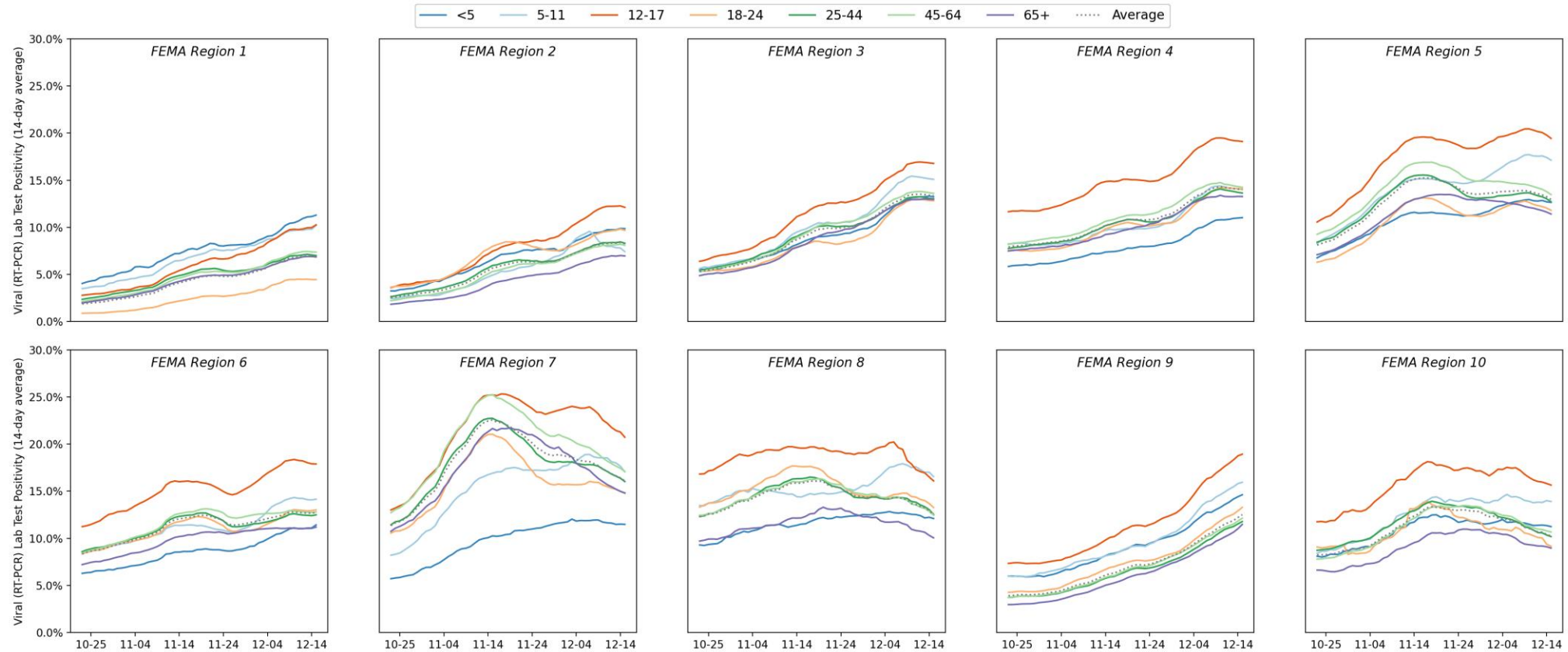


Figure depicts the 14-day average percent test positivity for each region and age group over the 8-week period of 10/23-12/15. Average includes records with known age only.

Source: COVID-19 Electronic Lab Reporting (CELR) and Federal Direct Report Testing Data, limited to records with known age over the period 10/23-12/15.

# SELECT HIGH BURDEN CORE-BASED STATISTICAL AREAS (CBSAS)

WY and OH county-level test information is provided directly to the federal government and is missing a significant proportion of known state tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states. ME, MO, OK, PR, and WA test information at the county and state levels is provided directly to the federal government and may underestimate the total number of tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.

\*CA, DC, WI, and VI testing data have not been reported to the federal level since 12/13 or earlier (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity. CT and WI testing reporting is low this week, which may result in inaccuracies.

## Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Nashville, TN (1,934,317)	16,305 (843)	19.1%	+52%	+1.4%	
Phoenix, AZ (4,948,203)	30,849 (623)	16.9%	+22%	+1.8%	
Las Vegas, NV (2,266,715)	13,115 (579)	20.0%	-2%	-1.6%	
Indianapolis, IN (2,074,537)	13,792 (665)	15.9%	-4%	-0.4%	
Pittsburgh, PA (2,317,600)	16,248 (701)	14.7%	+25%	-0.7%	
Dallas, TX (7,573,136)	38,508 (508)	15.3%	+22%	+0.7%	
Cincinnati, OH (2,221,208)	12,191 (549)	16.2%	-19%	-2.4%	
Tucson, AZ (1,047,279)	7,365 (703)	24.8%	+12%	+1.7%	
Cleveland, OH (2,048,449)	10,422 (509)	19.7%	-29%	-1.5%	
Columbus, OH (2,122,271)	10,814 (510)	16.0%	-29%	-0.7%	

## Population 250k – 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Knoxville, TN (869,046)	7,581 (872)	23.3%	+50%	+3.5%	
Chattanooga, TN (565,194)	4,241 (750)	18.1%	+52%	+1.5%	
Dayton, OH (807,611)	4,718 (584)	19.9%	-14%	-0.3%	
Greenville, SC (920,477)	5,026 (546)	21.9%	+9%	+0.8%	
Tulsa, OK (998,626)	5,013 (502)	23.6%	+1%	+1.5%	
Provo, UT (648,252)	4,172 (644)	18.0%	-3%	-3.6%	
Toledo, OH (641,816)	3,748 (584)	18.6%	-17%	-3.6%	
New Haven, CT* (854,757)	4,792 (561)	18.1%	+20%	+7.0%	
Boise City, ID (749,202)	4,427 (591)	17.6%	-12%	-6.2%	
York, PA (449,058)	3,025 (674)	18.4%	-4%	+0.7%	

## Population 50k – 250k

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Yuma, AZ (213,787)	2,450 (1,146)	30.6%	-1%	+4.0%	
Meadville, PA (84,629)	1,237 (1,462)	32.0%	+113%	+3.0%	
Sevierville, TN (98,250)	1,182 (1,203)	25.6%	+75%	+1.6%	
Johnson City, TN (203,649)	1,788 (878)	23.1%	+36%	+0.4%	
Somerset, PA (73,447)	989 (1,347)	28.4%	+61%	+2.7%	
Cleveland, TN (124,942)	1,170 (936)	24.4%	+35%	-0.1%	
Williamsport, PA (113,299)	1,156 (1,020)	22.0%	+49%	+2.5%	
Morristown, TN (142,749)	1,348 (944)	20.4%	+50%	-1.0%	
Coeur d'Alene, ID (165,697)	1,125 (679)	38.0%	-32%	+3.9%	
Weirton, WV (116,074)	948 (817)	23.4%	-12%	-2.9%	

Within each population bin, CBSAs are ordered by the sum of 3 individual attribute rankings: 7-day case count, 7-day cases per 100,000 population, and 7-day average viral (RT-PCR) lab test positivity. The CBSAs with the ten smallest sums are shown.

Last 7 days indicates cases/deaths/admissions data from 12/11-12/17 and testing data from 12/9-12/15.

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# SELECT CORE-BASED STATISTICAL AREAS (CBSAS) WITH INCREASING BURDEN

WY and OH county-level test information is provided directly to the federal government and is missing a significant proportion of known state tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states. ME, MO, OK, PR, and WA test information at the county and state levels is provided directly to the federal government and may underestimate the total number of tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.

\*CA, DC, WI, and VI testing data have not been reported to the federal level since 12/13 or earlier (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity. CT and WI testing reporting is low this week, which may result in inaccuracies.

## Population over 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Nashville, TN (1,934,317)	16,305 (843)	19.1%	+52%	+1.4%	
Phoenix, AZ (4,948,203)	30,849 (623)	16.9%	+22%	+1.8%	
Orlando, FL (2,608,147)	8,965 (344)	9.2%	+49%	+0.6%	
San Antonio, TX (2,550,960)	9,915 (389)	16.0%	+12%	+2.4%	
Tucson, AZ (1,047,279)	7,365 (703)	24.8%	+12%	+1.7%	
Memphis, TN (1,346,045)	8,254 (613)	12.4%	+63%	+0.1%	
Virginia Beach, VA (1,768,901)	4,705 (266)	17.2%	+16%	+0.9%	
Austin, TX (2,227,083)	5,612 (252)	9.2%	+20%	+0.8%	
Dallas, TX (7,573,136)	38,508 (508)	15.3%	+22%	+0.7%	
Jacksonville, FL (1,559,514)	5,998 (385)	9.3%	+26%	+0.3%	

## Population 250k – 1 million

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Knoxville, TN (869,046)	7,581 (872)	23.3%	+50%	+3.5%	
Springfield, MO (470,300)	2,264 (481)	16.8%	+41%	+3.7%	
Norwich, CT* (265,206)	1,231 (464)	13.0%	+33%	+5.4%	
Chattanooga, TN (565,194)	4,241 (750)	18.1%	+52%	+1.5%	
New Haven, CT* (854,757)	4,792 (561)	18.1%	+20%	+7.0%	
Kingsport, TN (307,202)	2,174 (708)	27.6%	+22%	+4.1%	
Savannah, GA (393,353)	735 (187)	13.1%	+23%	+2.6%	
Asheville, NC (462,680)	1,744 (377)	10.4%	+45%	+1.2%	
Urban Honolulu, HI (974,563)	666 (68)	3.3%	+44%	+1.1%	
McAllen, TX (868,707)	1,937 (223)	14.8%	+23%	+1.9%	

## Population 50k – 250k

CBSA (population)	Last 7 days		Change from previous week		Daily case trend – last 8 weeks
	Cases (per 100k)	Viral (RT-PCR) lab test positivity	Percent change in cases	Absolute change in test pos.	
Waycross, GA (55,199)	252 (457)	11.5%	+88%	+7.5%	
Lake City, FL (71,686)	289 (403)	12.8%	+75%	+4.3%	
Eagle Pass, TX (58,722)	418 (712)	17.2%	+68%	+5.5%	
Palestine, TX (57,735)	223 (386)	13.7%	+87%	+3.4%	
Panama City, FL (174,705)	903 (517)	14.7%	+82%	+3.7%	
Meadville, PA (84,629)	1,237 (1,462)	32.0%	+113%	+3.0%	
Somerset, PA (73,447)	989 (1,347)	28.4%	+61%	+2.7%	
Dublin, GA (64,090)	274 (428)	11.9%	+54%	+2.7%	
Crossville, TN (60,520)	533 (881)	19.2%	+71%	+2.4%	
Athens, TN (53,794)	517 (961)	22.1%	+40%	+3.2%	

Within each population bin, CBSAs with at least 200 total cases and at least 30 cases per 100K in the past 7 days are ordered by the sum of 2 individual attribute rankings: 7-day percent change in cases and 7-day absolute change in viral (RT-PCR) lab test positivity. The CBSAs with the ten smallest sums are shown.

Last 7 days indicates cases/deaths/admissions data from 12/11-12/17 and testing data from 12/9-12/15.

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# DATA SOURCES AND METHODS

## DATA NOTES

- Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in changes from day to day.
- Demographics/Population:** Population and demographic data is from 2019 Census estimates.
- Cases and Deaths:** COVID-19 case and death metrics at the state and county level are generated using a dataset managed by the CDC which is compiled from state and local health departments. Most states and localities report both confirmed and suspected cases and deaths, although some report just confirmed cases and deaths. To ensure data quality, daily data alerts are monitored for deviations in the data (e.g., decreases in cumulative values, no change in values, abnormal increases in values). These alerts are manually reviewed every day by checking the data against local government websites, state websites, and news sources, and the raw values are corrected as needed to reflect local government reports. Cases are based on date of report and not on date of symptom onset. This may cause artificial spikes in any given day of data. Changes in reporting may also cause temporary spikes or dips (e.g. shifts from reporting confirmed and probable cases to reporting just confirmed cases). Case data are presented as 7-day totals or averages to adjust for these anomalies as well as weekly variations in reporting. CBSA-level data are calculated by aggregating county/municipio-level data. Regional and national values are calculated by aggregating state-level data.
- Puerto Rico Municipios:** JHU Center for Systems Science and Engineering (CSSE) COVID-19 Data, <https://github.com/CSSEGISandData/COVID-19/>.
- Testing:** CELR (COVID-19 Electronic Lab Reporting) state health department-reported data are used to describe state-level totals when able to be disaggregated from serology test results and to describe county-level totals when information is available on patients' county of residence or healthcare providers' practice location. HHS Protect laboratory data (provided directly to Federal Government from public health labs, hospital labs, and six commercial labs) are used otherwise. Some states did not report on certain days, which may affect the total number of tests resulted and positivity rate values. Total diagnostic tests are the number of tests performed, not the number of individuals tested. Viral (RT-PCR) lab test positivity rate is the number of positive tests divided by the number of tests performed and resulted. Testing data may be backfilled over time, resulting in changes week-to-week in testing data.
- Hospital Data:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Total inpatient bed, ICU bed, and ventilator counts are calculated as an average among reports from each hospital in the given timeframe. Utilization metrics calculate the average utilization in the geography for the week. Due to inconsistent reporting and impacts of staffing on the total number of beds at each hospital, variations may occur over time and the number shown may not be a full representation of the true number of resources in the area. Total number of admissions is calculated as a sum of confirmed and suspected admissions reported by all hospitals reporting in the given timeframe. Due to inconsistent reporting and data errors, the number shown may not be a full representation of the true number of admissions in the area.

## COLOR THRESHOLDS

- Results for each indicator should be taken in context of the findings for related indicators (e.g., changes in case incidence and testing volume)
- Colors are applied after rounding to the displayed precision

LAST 7 DAYS						% CHANGE FROM PREVIOUS 7 DAYS			
Cases – last 7 days	Cases per 100k – last 7 days	Viral (RT-PCR) lab test positivity rate – last 7 days	Total RT-PCR diagnostic tests – last 7 days (may be an underestimate due to delayed reporting)	RT-PCR tests per 100k – last 7 days (may be an underestimate due to delayed reporting)	Deaths – last 7 days	Deaths per 100k – last 7 days	Cases – % change	Viral (RT-PCR) lab test positivity rate – absolute change	Deaths – % change
colored by per capita thresholds	0 – 4	0.0% – 2.9%	colored by per capita thresholds	5,000 or more	colored by per capita thresholds		-26% or less	-2.1% or less	-26% or less
	5 – 9	3.0% – 4.9%		3,000 – 4,999		0.0	-25% – -11%	-2.0% – -0.6%	-25% – -11%
	10 – 50	5.0% – 7.9%		2,000 – 2,999		0.1 – 1.0	-10% – 0%	-0.5% – 0.0%	-10% – 0%
	51 – 100	8.0% – 10.0%		1,000 – 1,999		1.1 – 2.0	+1% – +10%	+0.1% – +0.5%	+1% – +10%
	101 – 199	10.1% – 15.0%		500 – 999		2.1 – 5.0	+11% – +25%	+0.6% – +2.0%	+11% – +25%
	200 or more	15.1% – 100%		0 – 499		5.1 or more	+26% or more	+2.1% or more	+26% or more
dark green									
green									
yellow									
orange									
light red									
dark red									

## Cases and Deaths

- County-level cases and deaths data are inclusive of all updates as of 3PM 12/18/2020.
- PR county-level case data are inclusive of all updates as of 3PM 12/18/2020.

## County Test Data Source by State

- **Data provided directly to the federal government:** ME, MO, OH, OK, PR, WA, WY
- **CELR data from states provided in aggregate format:** VI
- **CELR data from states provided in line level format:** AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WI, WV
- WY and OH county-level test information is provided directly to the federal government and is missing a significant proportion of known state tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.
- ME, MO, OK, PR, and WA test information at the county and state levels is provided directly to the federal government and may underestimate the total number of tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.

## State Test Data Source by State

- **Data provided directly to the federal government:** ME, MO, OK, PR, WA
- **CELR data from states provided in aggregate format:** OH, VI, WY
- **CELR data from states provided in line level format:** AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WI, WV
- WY and OH county-level test information is provided directly to the federal government and is missing a significant proportion of known state tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.
- ME, MO, OK, PR, and WA test information at the county and state levels is provided directly to the federal government and may underestimate the total number of tests. Because of this, the calculated percent test positivity may be unreliable in some counties in these states.

## States that have provided no county testing data for the most recent days of reporting:

- VI provided no testing data after 10/18: VI's testing numbers may therefore be a significant underestimate of the true value.
- DC provided no testing data after 12/05: DC's testing numbers may therefore be a significant underestimate of the true value.
- CA provided no testing data after 12/08: CA's testing numbers may therefore be a significant underestimate of the true value.
- WI provided no testing data after 12/09: WI's testing numbers may therefore be a significant underestimate of the true value.
- CT provided no testing data after 12/14: CT's testing numbers may therefore be a significant underestimate of the true value.
- NJ provided no testing data after 12/14: NJ's testing numbers may therefore be a significant underestimate of the true value.
- TN provided no testing data after 12/14: TN's testing numbers may therefore be a significant underestimate of the true value.

## States that have provided no state testing data for the most recent days of reporting:

- VI provided no testing data after 10/18: VI's testing numbers may therefore be a significant underestimate of the true value.
- DC provided no testing data after 12/05: DC's testing numbers may therefore be a significant underestimate of the true value.
- CA provided no testing data after 12/08: CA's testing numbers may therefore be a significant underestimate of the true value.
- WI provided no testing data after 12/09: WI's testing numbers may therefore be a significant underestimate of the true value.
- CT provided no testing data after 12/14: CT's testing numbers may therefore be a significant underestimate of the true value.
- NJ provided no testing data after 12/14: NJ's testing numbers may therefore be a significant underestimate of the true value.
- TN provided no testing data after 12/14: TN's testing numbers may therefore be a significant underestimate of the true value.

# DATA SOURCES AND METHODS – AOC CONTINUUM

The **Areas of Concern Continuum** is used to describe communities as they progress through stages of the epidemic. There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

## Low Burden Community

**Purpose:** Identify communities with minimal activity.

**Definition:**

- <10 new cases per 100k population in the last week

## Moderate Burden Community

**Purpose:** Identify communities with moderate disease activity.

**Definition:**

- Has **NOT** been identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks  
AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving  
AND
- Does not meet the definition for being a Low Burden Community

## Emerging Hotspot

**Purpose:** Generate early and reliable signals of communities with emerging increases in disease burden that have a high likelihood for becoming a hotspot in the next 1-7 days.

**Method:**

Decision tree model that leverages the following features, trained based on prior data:

Cases

- Total cases in the last week
- Total cases per 100k population in the last week
- New cases in the last week minus new cases the previous week
- Ratio of total cases in last 7 days to total cases in last 30 days

Testing

- Number of tests last week
- Difference in percent positive tests in last 7 days from last 21 days

## Hotspot

**Purpose:** Identify communities that have reached a threshold of disease activity considered as being of high burden.

**Definition:**

- >100 new cases per 100k population OR >500 new cases in the past week  
AND
- Number of days in downward case trajectory\*  $\leq 7$  days  
AND
- >50 cases during past week  
AND
- Conditions must hold for at least 3 of the previous 5 days

## Sustained Hotspot

**Purpose:** Identify communities that have had a high sustained case burden and are at potentially higher risk for experiencing healthcare resource limitations.

**Definition:**

- Either Hotspot for at least 7 preceding days or already a Sustained Hotspot on previous day  
AND
- >200 new cases per 100k population OR >1,000 new cases in the past two weeks  
AND
- Daily incidence rate >15 new cases per 100k population for 8 or more of the last 14 days OR test positivity >10% over last 14 days  
AND
- >100 cases during the last two weeks  
AND
- Conditions must hold for at least 3 of the previous 5 days

**Data Sources:** CDC Aggregate County Data; Unified Testing Dataset; US Census 2019

## High Burden - Resolving

**Purpose:** Identify communities that were recently identified as hotspots and are now improving.

**Definition:**

- Identified as a Hotspot or Sustained Hotspot within the last 2 weeks  
AND
- Not currently a Emerging Hotspot, Hotspot, or Sustained Hotspot  
AND
- >100 new cases per 100k population OR >500 new cases in last week  
AND
- Number of days in downward trajectory\*  $\geq 7$   
AND
- >50 cases during last week OR both  $\geq 10$  cases in last week and >10% test positivity in last week

## Moderate Burden - Resolving

**Purpose:** Identify communities that have a moderate level of burden, but are demonstrating improvement.

**Definition:**

- Identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks  
AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving  
AND
- Does not meet the definition for being a Low Burden Community

**\*Number of Days in Downward Case Trajectory:** This field is calculated using a CDC algorithm that first fits a smooth spline curve to daily case counts, and then counts the number of days that curve has been decreasing or at a low level. More specifically, the computation is based on a cubic spline fit of the 7-day rolling average of cases. The number of days decreasing (in downward trajectory) is calculated by summing the number of consecutive days of decline or near-zero incidence. A day is considered part of a downward trajectory if it (i) was previously at elevated incidence (had a two-week incidence greater than 10 cases per 100k population), and (ii) meets one of the following three conditions: (a) had a negative slope, OR (b) was in a low-incidence plateau (two-week incidence  $\leq 10$  cases per 100k population and a slope  $\geq 0$  to  $< 0.1$  new cases per 100k population based on a 7-day moving average), OR (c) had less than 5 cases in the past 2 weeks.